

TB 11/22/94

SITE INSPECTION REPORT

VANGUARD VINYL SIDING, INC.

AKA: GAF VANGUARD VINYL SIDING

EPA ID#:. NJD982530073

GLOUCESTER CITY, CAMDEN COUNTY



New Jersey Department of Environmental Protection and Energy Division of Publicly Funded Site Remediation Site Assessment

VANGUARD VINYL SIDING, INC. AKA: GAF VANGUARD VINYL SIDING CHARLES AND WATER STREETS GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY EPA ID NO. NJD982530073

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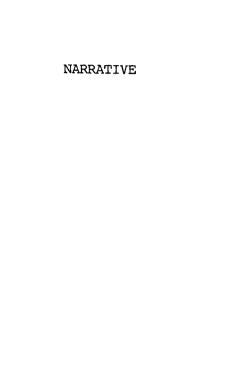
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SITE INSPECTION REPORT

PART I: GENERAL INFORMATION

Site Name: Vanguard Vinyl Siding, Inc.

Aka: GAF Vanguard Vinyl Siding Address: Charles and Water Streets

Municipality: Gloucester City State: New Jersey Zip Code: 08030

County: Camden

EPA ID No.: NJD982530073

Block: 110 **Lot(s):** 3B

Latitude: 39⁰ 53' 26" Longitude: 75⁰ 07' 45"

Acreage: 2.06 SIC Code: 3292

Current Owner: Facility is abandoned

Current Operator: Facility is abandoned

Owner/Operator History:

| | OPERATOR/ | DATES | |
|------------------------------|---------------------------------|------------------|---------------|
| NAME | OWNER | FROM | <u>TO</u> |
| Vanguard Vinyl Siding | Owner and Operator | 1981 | 1983 |
| GAF Vanguard Vinyl Siding | Merger with Ruberoid Company | 1967 | 1981 |
| Ruberoid Company | Owner and Operator | 1935 | 1981 |
| Lang Mills | Owner and Operator | prior to 1930 | 1935 |
| Pusey and Jones Shipyard | Owner and Operator | late 1890s | early 1900 |

Although Gloucester City does not own the property, it retains resale rights as a result of back taxes owed by the previous owner.

Surrounding Land Use (zoning, adjacent properties):

The facility is situated in an industrial park and is bordered to the south by an abandoned portion of the GAF Corporation, the west by the Delaware River, the east by Water Street and the north by Koch Fuels, Inc.

Distance to Nearest Residence: 0.3 mile

Direction: northeast

Population Density (residents per square mile):

There are 2,315 people per square mile in Gloucester City according to a 1990 Census.

PART II: SITE OPERATIONS

Discuss all current and past operations at the site.

Sanborn Fire Insurance maps indicate that a hotel and cottages were situated on and around the property from the late 1890s through the early 1900s. Prior to World War I, the site was occupied by the Pusey and Jones Shipyard (also known as the Pennsylvania Ship Building Company) and a paper production facility owned and operated by Lang Mills. The precise nature of site operations dating back to the early part of the century while functioning as a shipyard and paper mill are unknown (refer to attachment N).

The manufacturing of products containing asbestos, such as piping and shingles, dates from the early 1950s through the 1960s, while under the ownership and operation of the Ruberoid Company. Approximately 12 to 15 percent of the asbestos produced on site was discarded as a solid waste, possibly in an area to the rear of the facility. Vinyl siding produced by Vanguard Vinyl Siding (VVS), involved the use of polyvinyl chloride resins, stabilizers and Resins were stored in large silos situated on an outdoor, concrete pad along the north side of the facility. Pigments, stabilizers and other raw materials were stored in 55gallon drums on indoor and outdoor drum racks. The indoor rack was situated in the facility's northern corridor and lacked a secondary containment system. The outdoor drum rack, reported to be situated to the north of the outdoor concrete pad, also lacked the proper Other raw materials were stored in secondary containment system. variety of containers which were stored and handled at miscellaneous locations throughout the site (refer to attachment N).

The facility consists of two buildings referred to as Building 10 and Building 3, interconnected by three separate corridors. Designated work stations within the two buildings included a machine shop, dye shop, electrical shop, millwright shop, welding shop, blending area and quality control laboratory. The perimeter of the property is fenced with two entry points along Water Street (refer to attachment N).

Three areas of concern were identified by BMS of Plymouth Meeting, Pennsylvania, an environmental consulting firm retained by VVS in 1985. These include a truck loading area, designated as Area A, situated on the north side of Building 3 which was used as a shipping and receiving station for raw materials and finished products. Area B is located in the north corridor, where runoff from an indoor drum storage rack occurred. Area C, situated in the manufacturing building, consists of areas of exposed ground in the concrete floor (refer to attachment A).

Camden County Health Officials conducting an inspection on July 15, 1986 observed a variety of abandoned materials scattered haphazardly throughout the facility. These materials were stored in boxes, small containers, bags and 55-gallon drums and included,

phthalates and polyvinyl chloride resins, acetaminophen powder, dyes, titanium pigments, petroleum products, solvents, heat transferring fluids, automobile transmission fluids, unknowns and solid waste such as paper, cardboard and rags. In addition, a variety of laboratory reagents were discovered in the facility's former laboratory which included trichloroethane, methylene chloride and cyclohexanone. Asbestos related materials were also found in large quantities throughout the facility (refer to attachment D).

Joint follow-up inspections conducted by the NJDEPE, the Camden County Health Department and the Gloucester City Fire Department from September 1986 through February 1992, found site conditions to be largely unchanged; however, in some cases vandalism may have resulted in the spillage of material (refer to attachments A, E, F, H, I, and J).

The Department submitted the site to the U.S. Environmental Protection Agency Region II (EPA), for CERCLA removal action consideration on March 11, 1992. In response to the ongoing threat posed by the facility, the Department requested that EPA stabilize the site by characterizing, overpacking and disposing of all of the chemical and asbestos related hazardous materials in such a way as to safeguard the health and welfare of the local population. (refer to attachment O)

As a result of the Department's request, EPA conducted a Removal Site Evaluation (RSE) of the facility on April 1, and 16, 1992. Samples collected for hazard characterization indicated the presence of a variety of hazardous materials which qualified the site for removal eligibility. (refer to attachment P)

An Action Memorandum was approved by EPA Region II Headquarters on September 28, 1992 to address the drums and raw materials abandoned on site. EPA mobilized at the facility on December 14, 1992 and initiated removal activities. The first phase of the removal action was completed on July 2, 1993, resulting in the disposal of 30 tons of resin, 2,287 kilograms (kg) of polychlorinated biphenyl (PCB) oils, 70 gallons of oxidizers, 800 gallons of organic liquids, three 55-gallon drums of contaminated soil, 150 gallons of neutral liquids, three 55-gallon drums of lab packs, 3,000 gallons of asbestos wastewater and 320 cubic yards of asbestos contaminated materials. (refer to attachments Q and R)

A request for a ceiling increase was submitted by EPA's Region II Headquarters on September 23, 1993, for additional funding to complete Phase II of the removal action, which calls for the disposal of the remaining asbestos related material secured in bags on site. The request was not approved as of the date of this report (refer to attachment S).

On October 13, 1993, the NJDEPE, Division of Publicly Funded Site Remediation (DPFSR), Site Assessment Section (SA), collected nine soil samples from designated areas of concern which included runoff

from the former indoor and outdoor drum storage racks, open floor trenches in Building 3, an area surrounding an excavated drum carcass and soil adjacent to a 10,000-gallon aboveground storage tank. Sample results indicated levels for semivolatile organics, petroleum hydrocarbons and metals in excess of the Department's Soil Cleanup Criteria. Analytical results are discussed in Part XII: Sampling Data. (attachment U)

PART III: PERMITS

A. NJPDES

Discharge Date Expiration Formation or Body of Number Activity Issued Date Water Discharged To

none

B. New Jersey Air Pollution Control Certificates

Plant ID No.: not applicable No. of Certificates: none Equipment Permitted: none

C. BUST Registration

Registration No.: not applicable No. of Tanks: none

D. Other Permits

Agency Type of Date Expiration

<u>Issuing Permit Permit No. Issued Date</u>

none

PART IV: GROUND WATER ROUTE

A. HYDROGEOLOGY

Describe geologic formations and aquifer(s) of concern. Include interconnections, confining layers, discontinuities, composition and permeability.

The facility is situated near the western boundary of the Atlantic Coastal Plain Physiographic Region and is underlain by unconsolidated sediments of Quaternary, Tertiary and Cretaceous age consisting of alternating layers of sands, silts and clays. These sediments, estimated to be 250 feet thick, thicken eastward towards the Atlantic Ocean.

The most productive source of ground water in Camden County is the Potomac-Raritan-Magothy Aquifer system which consists of aquifers composed of sand and gravel and confining units of silts and clays. The sands are divided into three hydrologic units, an upper, middle and lower aquifer. The Magothy Formation comprises the upper unit while the middle and lower units are composed of sands of the Raritan Formation and the Potomac Group (refer to attachment W).

Depth to aquifer of concern: Site specific unknown (nearest well is 306 feet in depth)

Thickness of aquifer: 260 feet to 1,210 feet (attachment W)

Direction of ground water flow: west

Karst (Y/N): No

Wellhead Protection Area (Y/N): No Distance: NA

B. MONITORING WELL INFORMATION

Well No. Screen

Formation

Location

none

Identify the upgradient well(s): NA

Briefly discuss why the monitoring wells were installed and describe contaminants identified in the monitoring wells. Include Well No., sampling date, sampling agency or company, contaminant levels and cleanup standards.

There are no monitoring wells on site and subsequently no data available on site specific ground water quality.

C. POTABLE WELL INFORMATION

Distance to nearest potable well: 0.8 mile

Identify all public supply wells within 4 miles of the site:

| Water Company | Distance from site <u>(miles)</u> | Depth (feet) | <u>Formation</u> |
|---------------------------------------|---|-----------------|------------------|
| Gloucester City | 0.9 | 262 | GKMR |
| Gloucester City | 0.9 | 269 | GKMR |
| Gloucester City | 0.8 | 306 | GKMR |
| Gloucester City | 0.8 | 260 | GKMR |
| Brooklawn Borough Water Department | 0.9 | 327 | GKMR |
| Brooklawn Borough Water Department | 0.9 | 320 | GKMR |

| Water Company | Distance from site (miles) | Depth (feet) | <u>Formation</u> |
|---------------------------------------|----------------------------------|-----------------|------------------|
| Brooklawn Borough Water Department | 0.8 | 293 | GKMR |
| National Park Borough | 3.3 | 282 | GKMR |
| | 3.3 | 275 | GKMR |
| National Park Borough | 3.3 3.9 | 275 272 | GKMR |
| New Jersey American | 3.9 | 212 | GNIK |
| Water Company | 2.0 | 598 | GKMR |
| New Jersey American | 3.9 | 598 | GNIK |
| Water Company | 2 0 | 100 | GKMR |
| New Jersey American | 2.9 | 190 | GNIK |
| Water Company | 2 0 | 404 | GKMR |
| New Jersey American Water Company | 2.9 | 484 | GNIK |
| Collingswood Borough | 3.5 | 281 | GKMR |
| Collingswood Borough | 3.5 | 290 | GKMR |
| Collingswood Borough | 3.5 | 304 | GKMR |
| Collingswood Borough | 3.4 | 311 | GKMR |
| Collingswood Borough | 3.7 | 281 | GKMR |
| Collingswood Borough | 3.4 | 312 | GKMR |
| Collingswood Borough | 2.4 | 318 | GKMR |
| Bellmawr Borough | 1.6 | 359 | GKMR |
| Bellmawr Borough | 2.6 | 557 | GKMR |
| Bellmawr Borough | 2.5 | 562 | GKMR |
| Bellmawr Borough | 1.5 | 386 | GKMR |
| Haddon Twp. Water Dept. | 3.9 | 481 | GKMR |
| Haddon Twp. Water Dept. | 3.7 | 448 | GKMR |
| Haddon Twp. Water Dept. | 3.7 | 487 | GKMR |
| Haddon Twp. Water Dept. | 3.9 | 475 | GKMR |
| Camden City Water Division | | 230 | GKMR |
| Camden City Water Division | | 270 | GKMR |
| Camden City Water Division | | 290 | GKMR |
| West Deptford Water Dept. | 3.3 | 366 | GKMR |
| West Deptford Water Dept. | 2.6 | 363 | GKMR |
| Westville Borough | 1.3 | 313 | GKMR |
| Westville Borough | 1.4 | 274 | GKMR |
| Westville Borough | 1.2 | 317 | GKMR |
| Deptford Township MUA | 2.6 | 363 | GKMR |
| Woodbury City Water Dept. | 3.3 | 305 | GKMR |
| "Totally of of "acce bept. | 3.3 | 300 | |

^{*} GKMR - Magothy and Raritan Formations (Map 5)

Discuss private potable well use within 4 miles of the site. Include depth, formation and distance, if available.

Local and county records do not accurately reflect the precise number of active domestic wells within a 4-mile radius of the site. Although some wells may still be operational, most of the potable water in the area is supplied by a municipal system.

Distance from site (miles) 0 - 1/4 1/4 - 1/2 1/2 - 1 1 - 2 1 1,760 2 - 3 3 - 4 Population utilizing ground water 0 15,020 11,760 24,960 90,875

(refer to blending section of PA Score)

Discuss any evidence of contaminated drinking water or wells closed due to contamination.

There are no records indicating potable well closures as a result of contamination migrating from the facility.

Identify industrial/irrigational wells within the vicinity of the site. Include depth, formation, distance and direction, if available.

| Company | Distance from site <u>(miles)</u> | Depth (feet) | Formation |
|-----------------------|---|-----------------|-----------|
| G&W Natural Resources | 0.3 | 261 | GKR |
| G&W Natural Resources | 0.4 | 280 | GKR |
| G&W Natural Resources | 0.4 | 255 | GKR |
| G&W Natural Resources | 0.4 | 281 | GKR |
| G&W Natural Resources | 0.4 | 274 | GKR |

* GKR - Raritan Formation

(Map 5)

D. POTENTIAL

Discuss the potential for ground water contamination, including any other information concerning the ground water contamination route.

Contamination of ground water in the Potomac-Raritan-Magothy aquifer system in the Philadelphia area has created a potential water-quality problem for the Camden area near the Delaware River. The scope of contamination could extend as far south as the VVS facility (refer to attachment W).

The extensive site history and concentration of local industry may have impacted area ground water quality. Areas of environmental concern identified by joint and independent state, local and

private investigations, could contribute to the degradation of ground water quality as evidenced by the semivolatile, inorganic and petroleum hydrocarbon contamination found in concentrations in excess of the Department's Soil Cleanup Criteria (refer to attachment U).

PART V: SURFACE WATER ROUTE

A. SURFACE WATER

Does a migration pathway to surface water exist (Y/N): Y Flood plain: Zone A5 Slope: < 3 % 100-Year Flood Boundary

(refer to map 7)

Does contaminated ground water discharge to surface water (Y/N):

unknown

Identify known or potentially contaminated surface water bodies. Follow the pathway of the surface water and indicate all adjoining bodies of water along a route of 15 stream miles.

| Surface Water Body | Distance <u>from site</u> | Flow(cfs) | Usage(s) |
|--------------------|------------------------------|-----------|---|
| Delaware River | adjacent | 5900 | fishing, boating, potable/ industrial/ agricultural water source |
| | | | |

(refer to Map 1, attachment X)

Identify drinking water intakes within 15 miles downstream (or upstream in tidal areas) of the site. For each intake identify the distance from the point of surface water entry, the name of the supplier and population served.

The City of Philadelphia operates one drinking water intake along the Delaware River 14.7 miles upstream of the facility at Torresdale, Pennsylvania (refer to attachment N). Briefly discuss surface water or sediment sampling conducted in relation to the site. Discuss any visual observations of contamination if analytical data is not available (include date of observation). Include surface water body, sampling date, sampling agency or company, contaminant.

No sampling of surface water or sediments along the Delaware River adjacent to the site have been collected, therefore no data exists on the quality of these media.

Discuss the potential for surface water contamination, include any additional information concerning the surface water route.

Runoff from contaminated soil on site could impact the adjacent Delaware River. Tidal fluctuations raise the river into a channel which runs along the northern site boundary.

B. SENSITIVE ENVIRONMENTS

Identify all sensitive environments, including wetlands, along the 15 stream-mile pathway from the site:

| Environment Type | Surface Water Body | Flow (cfs) |
|-----------------------------------|--------------------|------------|
| Coastal wetlands (tidal flats) | Delaware River | 5,900 |

(Map 6)

Threatened and endangered species inhabiting the Delaware River include the shortnose sturgeon (<u>Acipenser</u> <u>brevirostrum</u>) and the American shad (<u>Alosa sapidissima</u>).

(refer to attachment N)

PART VI: AIR ROUTE

Discuss observed or potential air release.

All asbestos related materials on site which posed a chronic health threat have been removed or secured in bags as part of the removal action conducted by EPA. No other threats of an air related health hazard are currently present.

(attachment R)

Populations that reside within 4 miles of the site.

| Distance | (miles) | <u>Population</u> |
|-----------------|---------|-------------------|
| 0 - | 1/4 | 100 |
| 1/4 - | 1/2 | 3,505 |
| 1/2 - | 1 | 8,265 |
| 1 - | 2 | 28,150 |
| 2 - | 3 | 111,305 |
| 3 - | 4 | 160,095 |

(attachment N)

Identify sensitive environments and wetland acreage within 1/2 mile of the site.

Tidal flats varying in size and consistency, are situated to the north along the Delaware River and the south, extending into the confluence with Little Timber Creek.

(Map 6)
PART VII: SOIL EXPOSURE

Describe soil type. Include soil series, makeup of the soil and permeability of the soil.

Indigenous soil is classified as the Downer-Woodstown-Dragston series which includes gently sloping, grayish-brown sandy soils. The Downer series consists of nearly level to gently sloping dark grayish-brown, well-drained soils underlain by a yellowish-brown subsoil which is moderately to rapidly permeable (refer to attachment N).

Briefly discuss contaminants identified in the soil. Include sampling date, sampling agency or company, sample locations, depth and contaminant level.

BSM of Plymouth Meeting, Pennsylvania conducted limited soil sampling in November 1985 from the three previously mentioned areas of concern. Contaminants detected in the truck loading/unloading area (Area A) included petroleum hydrocarbons (PHCs) (9,080 ppm), 1,2-dichloroethane (1.08 ppm), di-(ethylhexyl) phthalate (7.56 ppm) and di-N-octyl phthalate (11.5 ppm). Contaminants detected in Area B where runoff from the former indoor drum storage rack occurred of indicated the presence PHCs (15,800 ppm), trans-1,2dichloroethene (2.70 ppm) and trans-1,3-dichloro-propylene (2.01 Lead in concentrations of 141 ppm was detected in Area C where open trenches are situated in Building #3 (refer to attachment A).

On October 13, 1993, the NJDEPE, DPFSR, SA collected nine soil samples ranging in depth from surficial to 4 feet at designated areas of concern throughout the facility which included runoff from the former indoor and outdoor drum storage racks, open floor

trenches in Building #3, an excavated drum carcass to the east of Building #3 and an area adjacent to a 10,000-gallon aboveground storage tank located in the south courtyard. Sample results indicate elevated levels for semivolatile organics, inorganics and petroleum hydrocarbons in excess of the Department's Soil Cleanup Criteria (refer to attachments T and U).

If no soil sampling has been conducted, discuss areas of potentially contaminated soil, areas that are visually contaminated or results from soil gas surveys.

Areas of contaminated soil are evident as a result of soil samples collected by the NJDEPE, DPFSR on October 13, 1993.

Number of people that occupy residences or attend school or day care on or within 200 feet of the site: 0 Number of workers on or within 200 feet of the site: 10

Does a subsurface gas threat exist? (Y/N): no If so, discuss the threat (homes or occupied buildings).

PART VIII: DIRECT CONTACT

Describe accessibility of the site (fencing, site security, evidence of unauthorized entry).

Although the boarded and locked building is surrounded by a secured fence, evidence of frequent breakins by vandals and adolescents is apparent. Efforts to secure the building from entry by the Gloucester City Fire Department have been unsuccessful. As a result of the removal action conducted by EPA, all of the hazardous materials within the building which posed a direct contact threat have been disposed of with the exception of bags of friable asbestos related material currently stored within the building in asbestos safe bags (refer to attachment R).

Number of on-site employees: 0

PART IX: FIRE AND EXPLOSION

Discuss all incidents on site which have involved a fire or explosion. Indicate the date of the incident and the materials involved.

Evidence of small fires within the building started by trespassers have been observed in the past. However, no instances of fires or explosions are on record for this facility.

Discuss site conditions which indicate a potential exists for fire or explosion (reactivity, incompatibility, ignitability, storage practices, container condition).

Conditions for a fire or explosion to occur as a result of site conditions have been greatly reduced as a result of the removal action conducted by EPA.

PART X: ADDITIONAL CONSIDERATIONS

Discuss evidence of wildlife or vegetation that has been or could be potentially impacted by on-site operations. Include areas exhibiting stressed vegetation or damage to wildlife.

No damage to flora or fauna was evident during the sampling episode conducted by the NJDEPE, DPFSR, SA, on October 13, 1993. A dead field mouse observed on this date can be attributed to natural causes.

Determine if a contaminant on site displays bioaccumulative properties. Name all bioaccumulative substances that may impact the food chain.

Contaminants with bioaccumulative properties, such as benzo (a) pyrene, arsenic and lead, were found in concentrations above the Department's Soil Cleanup Criteria (refer to attachment U).

Discuss observed or potential damage to off-site property. Consider migration routes from the site to an off-site property via soil, air or runoff. Do not count groundwater contamination to an off-site well as damage to off-site property.

No damage to off-site property is evident as a result of the facility's operational history.

PART XI: PREVIOUS OR ONGOING REMEDIAL ACTIONS

Discuss for each media all previous and ongoing remedial activities at the site. Include why initiated, type of action, date and present status.

The USEPA conducted a removal action on site at the request of the NJDEPE from December 14, 1992 to July 2, 1993 which resulted in the disposal of all containerized hazardous waste. Upon approval, Phase II of EPA's removal action will result in the final disposition of the bagged asbestos currently stored on site (refer to attachment R).

PART XII: ENFORCEMENT ACTIONS

1. Type of enforcement activity: Notice of Violation Issuing agent: NJDEP, Division of Hazardous Waste Management (DHWM), Bureau of Southern Field Office (BSFO)

Date: November 11, 1986
Description of violation:

Discharge of a hazardous substance and failure to notify the NJDEP (refer to attachment E)

Follow-up activity:

A second inspection conducted by the NJDEP, Division of Hazardous Waste Management (DHWM), on September 4, 1986, indicated that site conditions and similar violations remained unchanged (refer to attachment F)

2. Type of enforcement activity: Notice of Violation

Issuing agent: NJDEP, DHWM, BSFO

Date: August 8, 1991
Description of violation:

Discharge of a hazardous substance and failure to notify the NJDEP (refer to attachment L)

Follow-up activity:

No evidence of corrective action was found in the records researched for this document.

PART XIII: SAMPLING DATA

- 1. a. Sampling date: March 6, 1985
 - b. Sampled by: BMS

Plymouth 'Meeting, Pennsylvania

- c. Samples: (21) soil
- **d. Laboratory:** BCM Laboratory Division Norristown, Pa.

Certification No. 71715

e. Parameters: priority pollutants +45, total petroleum hydrocarbons, purgeable aromatics, purgeable halocarbons, barium, cadmium, chromium, lead, tin and titanium

f. Sample description:

Area A - 8 samples around the former drum storage area

Area B - 5 samples from area of runoff

Area C - 6 samples from trenches

1 background sample

g. Contaminants detected:

| AREA A | CONTAMINANT | CONCENTRATION (ppm) | SCC (ppm) |
|--------|----------------------------|---------------------|-----------|
| | di-(ethyl hexyl) phthalate | e 7.56 | NS |
| | di-n-octyl phthalate | 11.5 | 1,000 |
| | chloroform | 0.02 | 690.0 |
| | 1,2-dichloroethane | 1.08 | 1,000 |
| | tetrachloroethane | 0.70 | ns |
| * | arsenic | 2.72 | 2.0 |
| | barium | 35.1 | 26,000 |
| | cadmium | 0.70 | 100.0 |
| | chromium | 20.1 | NS |
| | mercury | 0.63 | 260.0 |
| | lead | 0.11 | 600.0 |
| | total petroleum hydrocarbo | ons 9,080 | 10,000 |
| AREA B | CONTAMINANT | CONCENTRATION (PPM) | SCC (ppm) |
| | methylene chloride | 0.14 | 170.0 |
| | trans-1,2-dichloroethylen | e 2.70 | NS |
| | chloroform | 0.31 | 690.0 |
| | bromodichloromethane | 0.61 | 22.0 |
| | trans-1,3-dichloropropyle | ne 2.01 | NS |
| * | total petroleum hydrocarbo | ons 15,800 | 10,000 |
| | | | |
| AREA C | CONTAMINANT | CONCENTRATION (PPM) | SCC (ppm) |
| | 1,2-dichloroethane | 0.32 | 1,000 |
| | 1,1,1-trichloroethane | 0.07 | 3,800 |
| | cis-1,3-dichloropropylene | 0.04 | NS |
| | tetrachloroethane | 0.09 | NS |
| * | arsenic | 2.85 | 2.0 |
| | barium | 20.8 | 26,000 |
| | cadmium | 0.98 | 4.0 |
| | chromium | 24.0 | NS |
| | mercury | 0.13 | 260.0 |
| | lead | 141.0 | 600.0 |

^{*} In excess of the Department's Soil Cleanup Criteria for Non Residential Direct Contact

88C - Soil Cleanup Criteria

- h. QA/QC: Quality Assurance/Quality Control was conducted by BCM. It is unclear whether the Department reviewed the laboratory data for QA/QC.
- i. File location: Attachment A
 NJDEPE, DPFSR, SA
 300 Horizon Center
 Robbinsville, NJ
- 2. a. Sampling date: October 13, 1993
 - **b. Sampled by:** NJDEPE, DPFSR, SA 300 Horizon Center Robbinsville, NJ
 - c. Samples: (9) soil
 - d. Laboratory: NYTEST Environmental Inc. 60 Seaview Blvd. Port Washington, NY

Certification No. 73469

e. Parameters: volatile organics, base neutrals, pesticides, metals, cyanides, total petroleum hydrocarbons, polychlorinated biphenyls (PCBs)

f. Sample description:

- (2) adjacent to the former outdoor drum storage rack 0 to 24"
- (1) runoff from the indoor drum storage rack 0 to 24"
- (1) adjacent to excavated drum carcass 0 to 24"
- (1) adjacent to the 10,000-gallon aboveground storage tank 0 to 24"
- (4) indoor floor trenches 0 to 24"

g. Contaminants Detected:

| SAMPLE # | CONTAMINANT | CONCENTRATION (ppm) | SCC (ppm) |
|----------|--------------|---------------------|-----------|
| s-1 | 4,4' - DDE | 0.08 | 9.0 |
| | Aroclor 1260 | 0.17 | 2.0 |
| * | arsenic | 8.2 | 2.0 |
| | TPHCs | 729.0 | 10,000 |
| S-2 | phenanthrene | 0.51 | NS |
| | fluoranthene | 0.73 | 1,000 |
| | pyrene | 0.74 | 10,000 |

| SAMPLE : | # | CONTAMINANT | CONCENTRATION (ppm) | SCC (ppm) |
|--------------|---|----------------------------------|---------------------|---------------|
| S-2 | | chrysene | 0.49 | 2.5 |
| | | Aroclor 1260 | 0.46 | 2.0 |
| | * | arsenic | 4.2 | 2.0 |
| | | TPHCs | 508.0 | 10,000 |
| S-3 | | 1,2-dichloroethene | 0.047 | 1,000 |
| | | trichloroethene | 0.14 | NS |
| | | 2-hexanone | 0.22 | NS |
| | | 2-methylnaphthalene | 1.9 | NS |
| | | phenanthrene | 3.4 | NS |
| | | di-n-butylphthalate | 8.1 | 10,000 2.0 |
| | * | WI DOIO | 4.9 | 10,000 |
| | | TPHCs | 9,460.0 | 10,000 |
| S-3RE | | 2-methylnaphthalene | 2.2 | NS |
| S-4 | | dimethyl phthalate | 3.6 | 10,000 |
| | * | arsenic | 8.4 | 2.0 |
| | * | lead | 788.0 | 600.0 |
| | | TPHCs | 357.0 | 10,000 |
| S-5 | | 4,4'-DDT | 0.6 | 9.0 |
| | * | arsenic | 8.1 | 2.0 |
| | * | antimony | 827.0 | 340.0 |
| | * | TPHCs | 235,000.0 | 10,000 |
| S-6 | | dimethyl phthalate | 2.2 | 10,000 |
| | | diethyl phthalate | 0.51 | 10,000 |
| | | aroclor 1260 | 0.2 | 2.0 |
| | * | antimony | 726.0 | 340.0 |
| | * | arsenic | 13.5 | 2.0 |
| | * | lead | 3,810.0 | 600.0 |
| | | TPHCs | 1,320.0 | 10,000 |
| S-6RE | | dimethyl phthalate | 9.3 | 10,000 |
| | | diethyl phthalate | 2.5 | 10,000 |
| S - 7 | | endosulfan I | 0.04 | 52.0 |
| <i>.</i> | | TPHCs | 1,270.0 | 10,000 |
| | | 0.6.21.15 | | MC |
| S-8 | | 2,6-dinitrotoluene | 2.0 | ns Ns |
| | | phenanthrene | 5.8 | |
| | | fluoranthene | 6.4 | NS |
| | | pyrene | 7.6 3.7 | 10,000 2.5 |
| | * | benzo(a)anthracene | 4.8 | 2.5 |
| | * | chrysene benzo(b)fluoranthene | 3.2 | 2.5 |
| | * | benzo(k) fluoranthene | 3.2 | 2.5 |
| | * | benzo(a) pyrene | 3.7 | 0.66 |
| | * | indeno(1,2,3-cd)pyrene | 2.6 | 2.5 |
| | * | benzo(g,h,i)perylene | 2.5 | 2.5 |
| | | ~ (3/11/1/Perlicule | 2.0 | <u> </u> |

| SAMPLE | SAMPLE # CONTAMINANT | | CONCENTRATION (ppm) | SCC (ppm) |
|--------|----------------------|------------------------|---------------------|-----------|
| S-8 | | endosulfan I | 0.21 | 52.0 |
| | * | antimony | 465.0 | 340.0 |
| | * | arbenire | 21.0 | 2.0 |
| | * | lead | 1,410.0 | 600.0 |
| | | TPHCs | 481.0 | 10,000 |
| S-8RE | | 2,6-dinitrotoluene | 2.2 | NS |
| | | phenanthrene | 6.3 | NS |
| | | fluoranthene | 6.8 | NS |
| | | pyrene | 7.7 | 10,000 |
| | * | benzo(a)anthracene | 3.7 | 2.5 |
| | * | chrysene | 4.8 | 2.5 |
| | * | benzo(b)fluoranthene | 4.0 | 2.5 |
| | * | benzo(k)fluoranthene | 3.4 | 2.5 |
| | * | benzo(a)pyrene | 3.7 | 0.66 |
| | * | indeno(1,2,3-cd)pyrene | | 2.5 |
| | * | benzo(g,h,i)perylene | 2.6 | 2.5 |
| S-9 | | toluene | 0.019 | 1,000 |
| | | phenanthrene | 17.0 | NS |
| | | anthracene | 4.2 | 10,000 |
| | | fluoranthene | 19.0 | NS |
| | | pyrene | 13.0 | 10,000 |
| | * | benzo(a)anthracene | 8.8 | 2.5 |
| | * | chrysene | 8.3 | 2.5 |
| | * | benzo(b)fluoranthene | 6.2 | 2.5 |
| | * | benzo(k) fluoranthene | 4.1 | 4.0 |
| | * | benzo(a)pyrene | 6.5 | 0.66 |
| | * | arsenic | 41.3 | 2.0 |
| | | TPHCs | 502.0 | 10,000 |
| S-10 | | di-n-butyl phthalate | 1.3 | 10,000 |
| | * | 4,4'-DDD | 0.30 | 12.0 |
| | * | arsenic | 4.2 | 2.0 |
| | | TPHCs | 655.0 | 10,000 |

* Indicates contaminants found in concentrations above the Department's Soil Cleanup Criteria for Non Residential Direct Contact

SCC - Soil Cleanup Criteria

i. File location: Attachment U
NJDEPE, DPFSR, SA
300 Horizon Center
Robbinsville, NJ

PART XIV: CONCLUSIONS AND RECOMMENDATIONS

Soil sampling results collected by the NJDEPE on October 13, 1993 indicate the presence of contaminants such as arsenic, lead, antimony and total petroleum hydrocarbons in excess of the Department's Soil Cleanup Criteria from each area of concern sampled. These results indicate the need for further sampling to delineate the extent of contamination and the necessity for soil excavation and disposal. The impact of the contaminated soil on ground water and the adjacent Delaware River are unknown and may also require further investigation. However, no further action under CERCLA is recommended at this time.

Submitted by: David E. Triggs

Title: HSMS II

NJDEPE, Division of Publicly Funded Site Remediation - Site

Assessment Section

Date: November 30, 1993

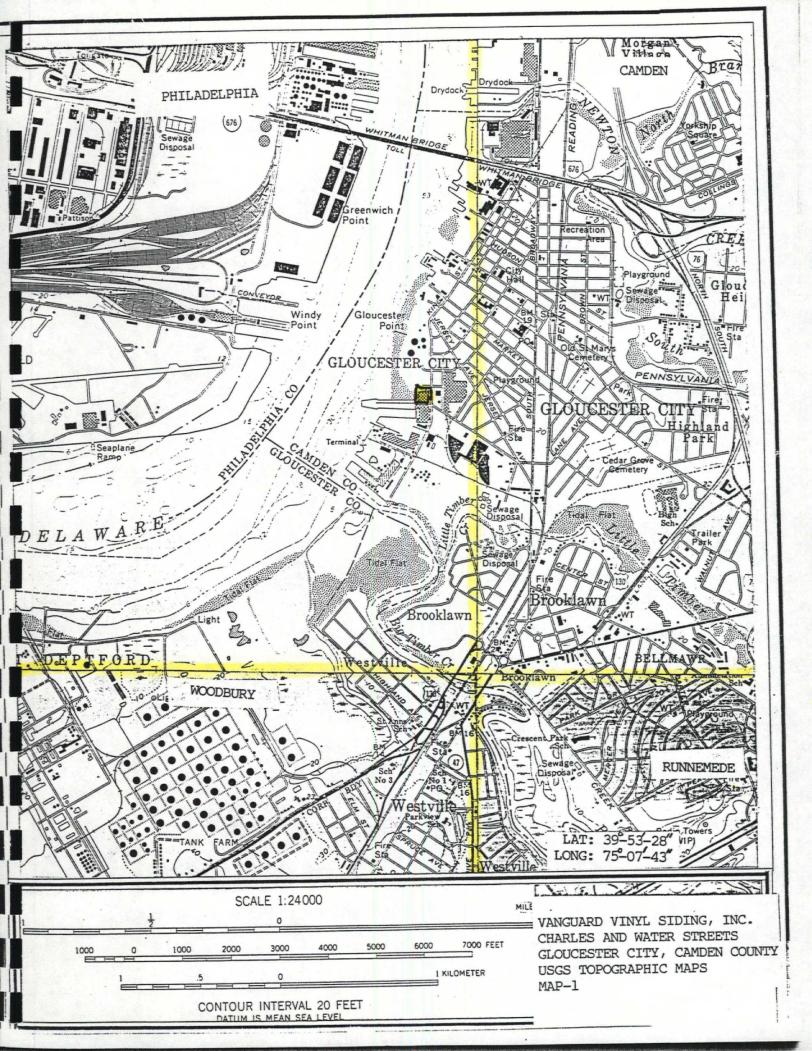
PART XV: POTENTIALLY RESPONSIBLE PARTIES

| NAME | OWNER/OPERATOR/ KNOWN DISCHARGER | CURRENT ADDRESS |
|-----------------------------|--|--|
| Vanguard Vinyl Siding | Owner and Operator | No longer in business |
| GAF Corp. | Merger with former owner Ruberoid Company | Water Street Gloucester City New Jersey, 08030 |
| Ruberoid Co. | Owner and Operator | unknown |
| Lang Mills | Owner and Operator | No longer in business |
| Pusey and Jones Shipyard | Owner and Operator | No longer in business |

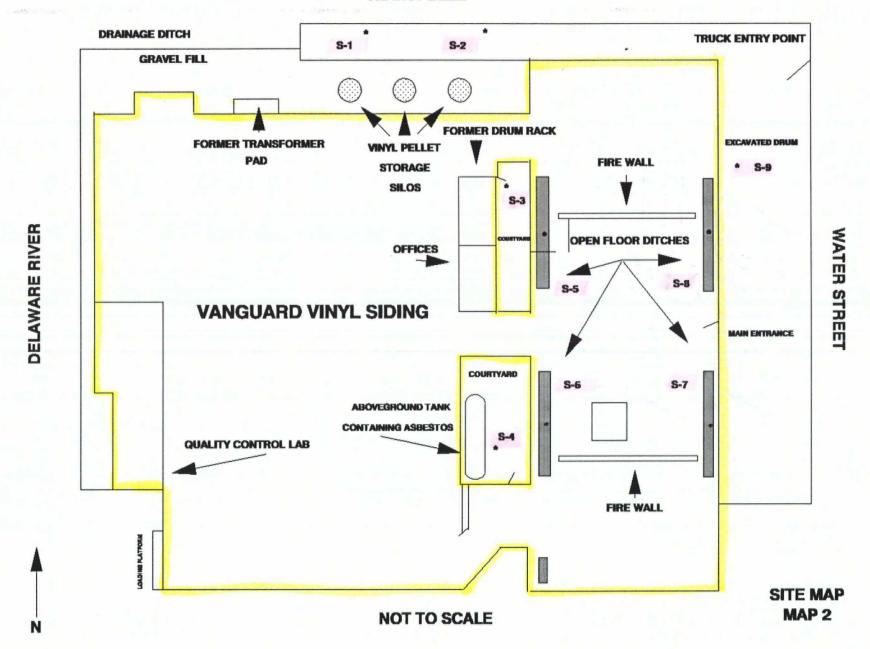
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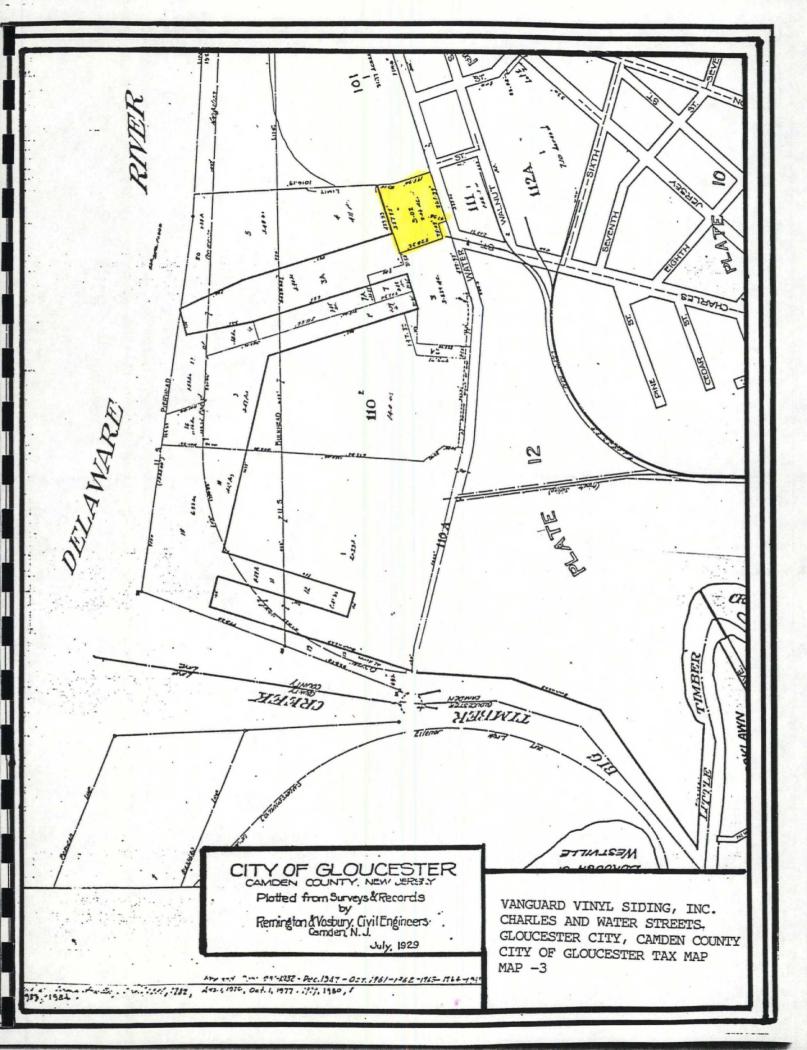
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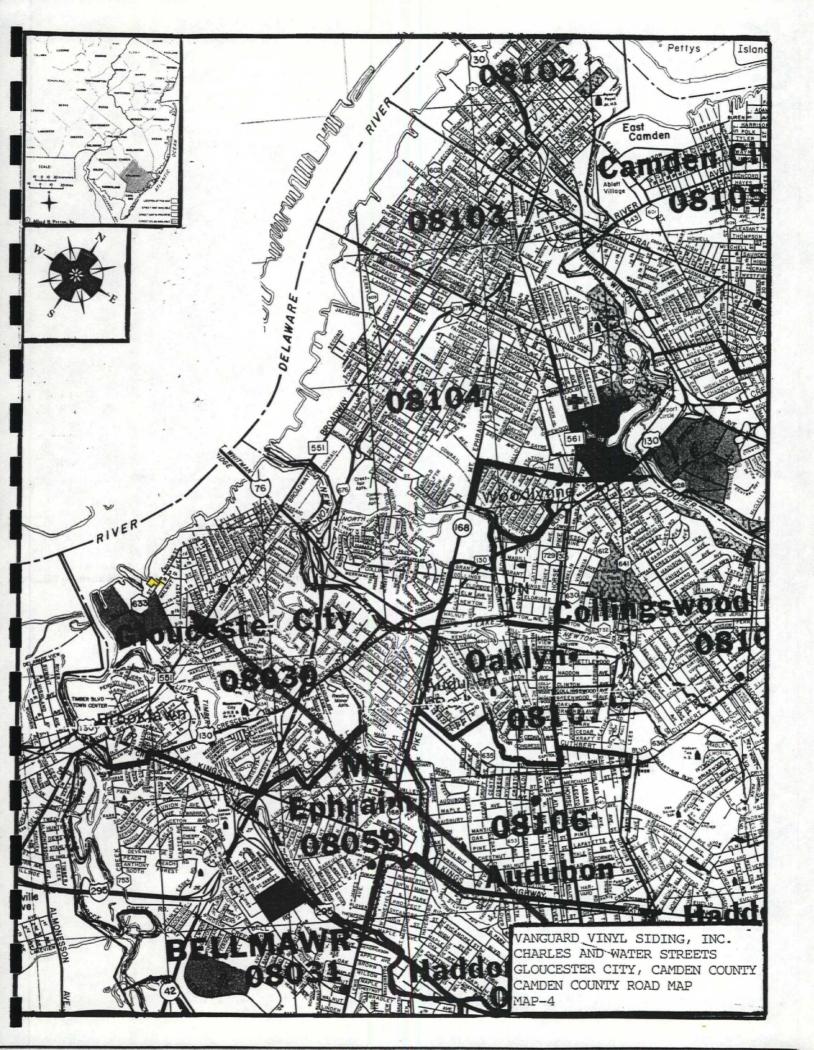
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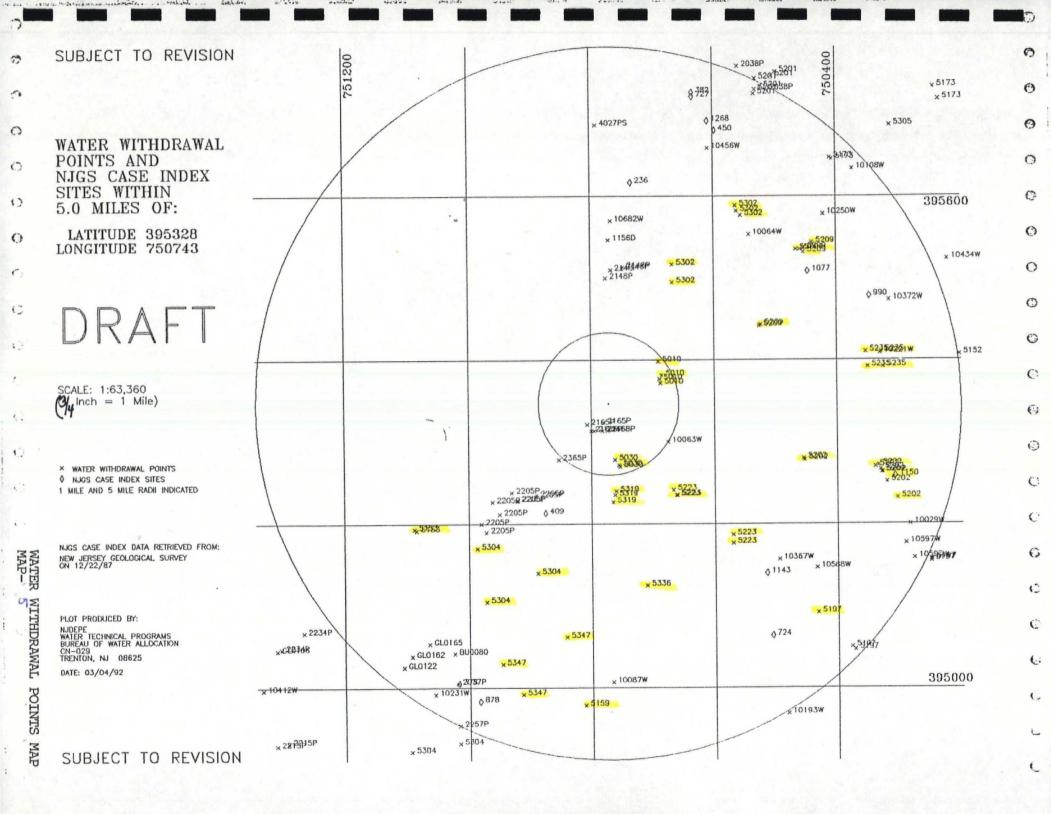


KOCH FUELS









Page 1 of PRELIMINARY SURVEY OF WATER WITHORAWAL POINTS WITHIN 5.0 MILES OF 395328 LAT. 750743 LON. (IN ORDER BY PERMIT NUMBER) - 03/04/92

| 0 | . tulted to | a bell i i standar del ida de la tarba i Vera i della periori | CH WITHING PL | MILLIA MILLIA | 3.0 TILLE | 15 Ur 370 | AZO LAI | . 750743 L | TM" (114 | Lindlein | BA LEP | MII MA | ER) - | 03/04/92 |
|-----|----------------|--|----------------|---------------|-----------|-----------|---------|------------|--|----------|---------|------------|-------|----------|
| | NUMBER | NAME | SOURCEID | LOCID | LAT | LCN | LLACC | DISTANCE | CCLNTY | MIN | DEPTH | GEO1 | ŒŒ | CAPACITY |
| 0 | 100Z9W | VEYETHYELEER FAFER COMPANY | 3105340 | 1 | 395200 | 750250 | F | 4.6 | 07 | 03 | 285 | CVARD | | 747 |
| | 10053W | | 3104482 | 1 | 395300 | 750645 | | | 07 | 14 | Addital | GOR GOR | | 243 |
| | 10054W | OUR LADY OF LOURDES MED. CENT. | 3104620 | 1 | 395532 | 750525 | | 3.1 | 07 | 08 | 257 | GMR | | 250 |
| 0 | 10097W | | 3102728 | 1 | 395004 | 750740 | | 3.9 | 15 | 22 | 221 | GOR | | 300 |
| | | CAMDEN CO VOC. & TECH. SCHOOLS | 3105139 | 1 | 395620 | 750344 | F | 4.8 | 07 | 15 | 401 | COR | | |
| | | GLCUCESTER TWP. M.U.A. | 3105902 | 2 | 394941 | 750449 | T | 5.0 | 07 | 15 | | GNR | | |
| (3 | | HADDON TOWNSHIP BOARD OF ED. | 3104986 | 1 | 395405 | 750318 | T | 3.9 | 07 | 16 | 165 | GMR | | 100 |
| | 10231W | | 3103393 | 1 | 394955 | 751034 | F | 4.8 | 15 | 22 | | GKMR | | |
| - | 10250W | BISHOP ELSTACE PREP SCHOOL | 3117824 | 1 | 395547 | 750413 | T | 4.1 | 07 | 27 | 150 | GUR | | 200 |
| 0 | 10367W | The state of the s | 3104633 | 1 | 395134 | 750457 | F | 3.3 | 07 | 30 | 222 | GMR | | 175 |
| | | MORGAN BRUTHERS, INC. | 3105136 | 1 | 375444 | 750309 | F | 4.3 | 07 | 16 | 451 | 303 | | 300 |
| - | 1041ZW | WHITE SHAN MOBILE HOMES | 3002737 | 1 | 394958 | 751320 | F | 6.3 | 15 | 20 | 178 | CHAR | | 70 |
| 0 | | GARDEN STATE RACE TRACK. INC. | 5100094 | 1 | 395514 | 750213 | T | 5.2 | 07 | 09 | 154 | EKR | | 300 |
| | 10456W | | 5100154 | 1 | 395635 | 750505 | F | 3.9 | 07 | 08 | 140 | CHAM | | 400 |
| - | 105884 | | 3129702 | | 395128 | 750421 | 14 | 3.7 | 07 | 30 | | GUR | | 30 |
| 0 | 10597W | The second secon | 3102492 | 1 | 395146 | 750254 | F | 4.5 | 07 | 0.3 | 318 | GOR | | 1000 |
| 1 | | CWENS-CORNING FIBERGLAS CORP. | 3102493 | 2 | 395135 | 750246 | F | 4.8 | 07 | 23 | 332 | BRITE | | 1000 |
| | 106921 | The same of the same of the same of | 3102053 | 1 | 395542 | 750740 | | 2.6 | 07 | 08 | 142 | ONTH | | 85 |
| C | 11560 | CAMPEN COUNTY MUA | | | 395528 | 750742 | F | . 2.3 | 07 | 03 | 55 | CRS | | 1200 |
| | 2037P | ATOCHEM INC ELF AGUITAINE GR | | WELL NO. 2 | 395003 | 751012 | 1 | 4.5 | 15 | 20 | 142 | GKMR | | 290 |
| | | ATOCHEM INC ELF AGUITAINE GR | 3103864 | WELL NO. 3 | 395003 | 751012 | 1 | 4.5 | 15 | 20 | 165 | BUR | | 220 |
| 62 | 2039P | CENERAL COLOR CO. | 3:19275 | 7 | 395735 | 750533 | | 5.1 | 07 | :08 | .94 | GKR | | 190 |
| | | CENERAL COLOR CO. | 3105064 | 5 | 375718 | 750507 | | 5.0 | 07 | 08 | 184 · | GIR | | 0 |
| | 2148P | MAC ANDREWS & FOREES COMPANY | 3100290 | 1 | 395507 | 750729 | F | 1.9 | 07 | 09 | 103 | BOR | | 300 |
| 0 | | MAC ANDREWS & FOREES COMPANY | 5100035 | 2 | 395500 | 750745 | | 1.8 | 07 | | 99 | GVR | | 350 |
| | | MAC ANDREVS & FOREES COMPANY | 3123380 | 2R | 395508 | 750728 | i: | 1.9 | 07 | 08 | 140 | GKMR | | 350 |
| _ | | MAC ANDREWS & FOREES COMPANY | DELAWARE RIVER | ν. | 395506 | 750740 | U | 1.9 | 07 | CS. | | SDEEL | | |
| 0 | 216EP | 6 & W NATURAL RESOURCES GROUP | 3106642 | 1R) | 395314 | 750748 | F | 0.3 | 07 | 14 | 261 | GKR | | 500 |
| | | G & W NATURAL RESOURCES GROUP | 3101210 | 2 | 39530B | 750757 | F | 0.4 | 07 | 14 | 280 | GKR | | 600 |
| - | | G & W NATURAL RESOURCES GROUP | 3103401 | 3 | 395313 | 750604 | F | 0.4 | 07 | 14 | 255 | EKR | | 600 |
| 0 | | G & W NATURAL RESOURCES GROUP | 3103402 | 4 | 395308 | 750744 | r = | 0.4 | 07 | 14 | 281 | BKR | | 600 |
| | | G & W NATURAL RESOURCES GROUP | 3104454 | 5 | 395309 | 750749 | 177 | 0.4 | 07 | 14 | 274 | GKR | | 600 |
| C | | 8 & W NATURAL RESOURCES GROUP | BIG TIMBER CR. | | 395308 | 750800 | U | 0.5 | 07 | 14 | | SDBIG | | |
| C. | Standard Visit | COASTAL EAGLE POINT OIL CO. | 3100007 | 1 | 395217 | 750913 | 1 | 1.9 | 15 | 20 | 288 | GOR | | 800 |
| | | COASTAL EAGLE POINT OIL CO. | 3100009 | 2 | 395207 | 750730 | 1 | 2.2 | 15 | 20 | 289 | CHAR | | 800 |
| . 0 | | COASTAL EAGLE POINT DIL CO. | 3100008 | 3 | 395223 | 750918 | 1 | 1.9 | 15 | 20 | 288 | GOTE | | 600 |
| G | | COASTAL EAGLE POINT OIL CO. | 3110547 | 4A | 395216 | 750937 | 1 . | 2.2 | 15 | 20 | 296 | CKIYR | | 1000 |
| | | COASTAL EAGLE POINT DIL CO. | 3100028 | 5 | 395221 | 750854 | 1 | 1.6 | 15 | 20 | 283 | GMR | | 600 |
| 0 | | COASTAL EAGLE POINT OIL CO. | 3117788 | EA | 395154 | 750943 | 1 | 2.5 | 05 | 20 | 335 | CKIT | | 1000 |
| 95 | | COASTAL EAGLE POINT DIL CO. | 3106934 | 7 | 395200 | | 1 | 2.5 | 15 | 20 | 306 | GROSS | | 1000 |
| | | COASTAL EAGLE POINT DIL CO. | CELAWARE RIVER | | 375217 | 750912 | U | 1.9 | 15 | 20 | | EDUEL | | 9500 |
| Ü | | COASTAL EAGLE FOINT OIL CO. | 3123046 | FW-1 | 395217 | 750912 | | 1.9 | 15 | 20 | 80 | GOTA | | 110 |
| 0 | | COASTAL EAGLE POINT QIL CO. | 3125768 | 147-2 | 395220 | 750955 | | 1.7 | 15 | 20 | 55 | CKMR | | 10 |
| | 221 5 P | HINTEMAN POLYFROPYLENE CORF. | 3000898 | WELL NO. 1 | 394917 | 751307 | 1 | 6.7 | 15 | 20 | 350 | GOT. | | 630 |
| | | HINTSHAN FOLYFROPYLENE CORP. | 3000999 | WELL NO. 2 | 394917 | 751307 | 1 | 5.7 | 15 | 20 | 290 | GKM? | | 200 |
| 0 | | HINTEMAN FOLYFROMMLENE COST. | 3000900 | WELL NO. 3 | | | | 5.6 | 15 | 20 | 384 | GOR | | S50 |
| | | HINTSWAY FOL YEROPYLENE COSP. | 3000901 | WELL NO. 4 | | | | 6.6 | 15 | 20 | 159 | GKYR | | 250 |
| 0 | 2234P | ALGIMONT USA.INC. | 3001173 | 418 | | 751302 | | 5.8 | 15 | 20 | 290 | GOTH | | 500 |
| 0 | | AUSIMONT USA.INC. | 3001174 | 417 | | 751240 | | 5.4 | 15 | 20 | 278 | GKYR | | 1000 |
| | 2257P | WESTWOOD GOLF CLUB | 3106200 | 1 | 394932 | 751010 | | 5.0 | 15 | 22 | 140 | CHA | | 450 |
| 0 | 236EP | SES GLOUCESTER COMPANY, L.F. | DELAWARE RIVER | FM 95.2 | | 750832 | | . 1.1 | 20 | 15 | | SDEEL | | |
| | 4027FS | GENERAL ELECTRIC AEROSPACE | DELAWARE RIVER | | | 750754 | T | 3.9 | 07 | CS | | SDDEL | | |
| | 5010 | GLOUCESTER CITY | 3104506 | WELL #40 | 395349 | | | 0.9 | | 14 | 262 | GM93 | | 1000 |
| O | | GLOUESTER CITY | 3127737 | VELL #41 | 395359 | | | 0.9 | The state of the s | 1-1 | 269 | Grank | | 1000 |
| | | SLOWESTER CITY | 3105242 | MELL 1842 | 二元(104) | 750650 | | 5.6 | .) | 14 | JOb | | | 17000 |

| NAMEER | VALE | SOLECEID | rocip. | LAT | LON | LLACC | DISTANCE | COLLINTY | MLN | DEFTH | ŒO1 | GEO2 | CAPACITY |
|--------|---------------------------------|--------------|-------------|-----------------------|----------|-------|----------|----------|-----|-------|---------|------|-----------------------------------|
| | CLOUDETER CITY | 3118822 | VELL #43 | 395346 | 75/0653 | | 0.8 | 07 | 14 | 260 | BKYR | | 1000 |
| 5030 | ERODALAMA ECROLOH WATER DEFT. | 3104325 | 1 | 395242 | 750732 | F | 0.9 | 07 | 07 | 327 | GOAR . | | 300 |
| | ERODICAVAL ECHOLISH WATER 18FT. | 3114471 | 3 | 395.43 | 750733 | F | 0.9 | 07 | 07 | 320 | GIVE | | 350 |
| | BECOLUMN ECROLER LATER DEFT. | 3115765 | -4 | 395247 | .50737 | F | 0.8 | 07 | 07 | 293 | GUR | | T50 |
| 5150 | HADDLE FIELD ECPLICA | 3105109 | 6 | 395404 | | | 5.0 | 07 | 17 | 380 | BOK | | 1000 |
| 5153 | NGTIONAL PARK BURCUSH | 3102555 | 5 | 395186 | 751053 | 1 | 3.3 | 15 | 12 | 282 | 日中元 | | 700 |
| | NATIONAL PARK BOSCOLISH | 3117939 | 6 | 395155 | 751051 | 1 | .3.3 | 15 | 12 | 275 | BITE | | 600 |
| 5159 | MODELEY HEIGHTS EOROLGH | 3106356 | 1 | 394547 | 750607 | 1 | 4.2 | 15 | 23 | 235 | BUR | | 1000 |
| 5173 | MERCHANTVILLE-PENNEAUXEN WATER | 3105641 | EHOWHING1A | 395427 | 750404 | | 4.7 | 07 | 24 | 1:52 | GIOTE (| | 875 |
| | MERCHANIVILLE-PENNEAUSEN WATER | 3102915 | MARION 1 | 395720 | 750225 | | 6.4 | 07 | 27 | 279 | GKMR | | 1000 |
| | METICHANT/ILLE-PENNGALKEN WATER | 3104641 | MARION 2 | 395711 | 750220 | | 6.4 | 07 | 27 | 262 | GOVE | | 1000 |
| | MERCHANIVILLE-PENNEALKEN WATER | 3104836 | ERCHNING2A | 395628 | 750406 | | 4.7 | 07 | 27 | 140 | GKMR | | 900 |
| 5197 | NEW JEISEY-AMERICAN WATER CO. | 3104743 | MAGNELIA16 | 395134 | 750229 | F | 5.1 | 07 | 23 | 510 | GOR | | 1050 |
| | NEW JERSEY-AMERICAN WATER CO. | 3105100 | MAGNOLIASS | 395134 | 750230 | F | 5.1 | 07 | 23 | 348 | GOR | | 1050 |
| | NEW JEHSEY-PHEHICAN WATER CO. | 5100015 | FMEDE 7 | 395055 | 750420 | F | 4.2 | 07 | 30 | 318 | GOR | | 325 |
| | MEN JERSEY-AMERICAN WATER CO. | 3103307 | FIEDE 19 | 395055 | 75/04/20 | F | 4.2 | 07 | 30 | 338 | GUYR | | 770 |
| | MEN JEFEEY-AMERICAN WATER CO. | 3104755 | OTTER 29 | 395030 | 750347 | Ŀ | 4.8 | 07 | 15 | 722 | GHY: | | 1050 |
| | NEW JERSEY-FMERICAN WATER CO. | 3105041 | OTTER 34 | 395028 | 750344 | | 4.9 | G7 | 15 | 37. | GOYR | | 1050 |
| | NEW JERSEY-FMERICAN WATER CO. | 3105226 | CTTER 39 | 395030 | 750347 | F | 4.8 | 07 | 15 | 349 | BOR | | 1400 |
| | NEW JERSEY-AMERICAN WATER CO. | PECPOSED | meencula64 | 395133 | 750230 | F | 5.1 | 07 | 23 | | OMR | | 1040 |
| 5201 | NEW DERSEY-AMERICAN WATER CO. | 3103455 | 50 | 395726 | 750518 | F | 5.0 | 07 | 08 | 170 | GOR | | 700 |
| | NEW JERSEY-AMERICAN WATER CO. | 3104790 | 51 | 3957/20 | 750513 | | 1 4.9 | 07 | 08 | 192 | BOME | | 1300 |
| | NEW JERSEY-AMERICAN WATER CO. | 3104847 | 52 | 395715 | | F | 4.8 | 07 | 08 | 198 | GON | | 1050 |
| | NEW JERSEY-AMERICAN WATER CO. | 3119947 | 573 | 395728 | 750502 | F | 5.2 | | 08 | 194 | GUR | | 1000 |
| | NEW JERGEY-WERICAN WATER CO. | 3119944 | 54 | 395731 | 750458 | F | 5.2 | 07 | OB | 195 | BOYR | | 1000 |
| | NEW JERSEY-AMERICAN WATER CO. | 3120270 | 55 | 395718 | 750518 | F | 4.9 | | 08 | 176 | BOYR | | 1050 |
| 5000 | NEW JERSEY-PATRICAN WATER CO. | 5100008 | HYADEXEN 11 | 395243 | 750320 | | 3.9 | | 19 | 272 | BOR | | 700 |
| | MEN JERSEY-WERICAN WATER CO. | 5100009 | HADDON 12 | 395240 | 750318 | F | 4.0 | | 18 | 267 | GOR | | 700 |
| | NEW JERSEY-AYERCEAN WATER OU. | 3101124 | HADDEN 14 | 395242 | 750323 | F | 3.9 | 07 | 19 | 579 | GOF: | | 900 |
| | MEN JERSEY-AMERICAN WATER CO. | 3102434 | HADDON 15 | 395238 | 750316 | F | 4.0 | 07 | 15 | 597 | COR | | 300 |
| | NEW JERSEY-AMERICAN WATER CO. | 3103375 | FADDON 20 | 395231 | 750312 | F | 9.1 | 07 | 18 | 257 | GRIFF | | 700 |
| | NEW WELLEY-AMERICAN WATER CO. | 3104798 | HADDON 30 | 395238 | 750317 | F | 4.0 | 07 | 18 | 279 | BOTE | | 205 |
| | YEN JEKSEY-FOREKICHN WATER CO. | 3103309 | ECRETY 18 | 395248 | 750433 | F | 2.9 | 07 | 18 | 190 | GMR | | 700 |
| | NEW JERSEY-PYERICASI WATER CO. | 3105054 | Ebteri 35 | 395247 | 750432 | F | 2.9 | 07 | 18 | 484 | BUR | | 700 |
| | NEW JERSEY-AMERICAN WATER CO. | PROPOSED | HOUGH 63 | 395219 | 750302 | F | 4.3 | 07 | 03. | 490 | GHOR | | 1040 |
| 5209 | COLLINGO-2000 BORGLIGH | 3104053 | 2PR | 395519 | 750432 | | 3.5 | 07 | 12 | 291 | GOR | | 700 |
| | COLLINGENCOD ECHOLEH | 3104054 | 341 | 395522 | 750432 | | 3.5 | 07 | 12 | 290 | GOR | | 800 |
| | COLLINGSHOOD BORGLIGH | 5100030 | 4 | 395531 | 750435 | | 3.5 | -07 | 12 | 304 | CHAR | | 870 |
| | COLLINGENEUD BEHELEH | 3100079 | 5 | 395521 | 750439 | | 3.4 | 07 | 12 | 311 | 日介有 | | 650 |
| | COLLINGSVEOD ECROLEH | 5100031 | 6 | 395526 | 750424 | | 3.7 | 07 | 12 | 281 | CHA | | 1000 |
| | OC.LINGBURGO NOROLGH | 3104799 | 7 | 305501 | 7ECH39 | | 3.4 | 07 | 12 | 312 | GOTH | | 1000 |
| | COLLINGENCES SERVICE | 3104797 | 8 | 395-26 | 750514 | | 2.4 | 07 | 12 | 318 | BOT. | | 1000 . |
| | COLLINESVADO ECHALEM | NEWTON CREEK | | 395425 | 750515 | | 2.4 | 07 | 12 | | SDLOO | | 1000 NOT USED |
| 5223 | BELLMANN BONOLEH | 5100032 | 1 | 395221 | 750636 | | 1.6 | 07 | 04 | 164 | BOTH | | 500 NO LONGER IN USE. |
| | FELLMAR ECECUSA | 3102697 | 3 | 395221 | 750637 | | 1.6 | O?/ | -04 | 359 | BOR | | 900 |
| | BELLMAKE BOROUGH | 3104969 | 4 | 395146 | 750542 | | 2.5 | 07 | 04 | Chil | CON | | 1000 |
| | ESTITIVE FORCEH | 3112315 | 5 | 395152 | 750542 | | 2.5 | 07 | 04 | 552 | GOR | | 1000 |
| | PELLIVER POPOLICH | 3119218 | 6 | 395225 | 750640 | | 1.5 | 07 | 04 | 326 | GOR | | 1000 |
| IZ.Z | MADDON TOWNERIES WATER DEPT. | 3105243 | 4.6 | 377/100 | 790317 | F | 3.5 | 55 | 16 | 481 | STA | | 570 |
| | HYGEON THANSHIP WATER DEPT. | 3104855 | 4 | | 750322 | F | 3.7 | 07 | 16 | 448 | GOT | | 1000 |
| | HADDON TOWNSHIP WATER DEPT. | 3129099 | it. | | 750330 | | 3.7 | 07 | 16 | 487 | GHYE | | 900 |
| | HADDON TOWNSHIP WATER DEPT. | 3128896 | 34) | | | | 3.9 | 07 | 16 | 475 | GKMR | | 750 |
| 5302 | CAMEEN CITY. WATER DIVISION | 5100060 | CITY 7 | 395457 | 750640 | F | 1.9 | 07 | CS. | 163 | GKMF: | | 150X-WATER ONLY SERVICES RESOURCE |
| | CAMPAN CUTY, WATER DIVISION | 5100061 | CITY 11 | 395510 | 750640 | F | 2.2 | 07 | CAR | :59 | CHAR | | 1010-only used in emergencies. |
| | DAVIOUS TOTAL WORKS DEVISION | 3100904 | CITY 13 | UNDER! | 750538 | F | 5.3 | -07 | 08 | 5130 | (ACT) | | 12(1) |
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| | CAMBEN CITY, WATER DIVISION | 3109574 | CITY 18 | 395549 | 750537 | F | 3.3 | 07 | 09 | 290 | GOR | | 1200 | |
| | CAMDEN CITY, WATER DIVISION | 3104549 | CITY 5 | 395457 | 750640 | | 1.9 | 07 | 03 | 171 | GOR | | 1100-Lised for G.W. monitoring. | i |
| 5304 | WEST DEPTECED WATER DEPT. | 3104231 | 2 | 395142 | 750952 | 5 | 2.8 | 15 | 20 | 353 | GOT | | 84-No longer in USE. | |
| | WEST DEPTECRO WATER DEFT. | 3103021 | 3 | 394719 | 751010 | S | 5.2 | 15 | 20 | 243 | GKMR | | 750 | |
| | WEST DEPTECED WATER DEFT. | 3107056 | 5 | 394913 | 751057 | S | 5.5 | 15 | 20 | 440 | GOTK | | 1000 | |
| | WEST DEPTFORD WATER DEFT. | 5100063 | 6 | 375103 | 750943 | S | 3.3 | 15 | 20 | 366 | GOT | | 1000 | |
| | WHET DEPTHURD WATER DEPT. | 3117452 | 7 | 395124 | 750853 | S | 2.6 | 15 | 20 | 353 | EHYR | | 1000 | |
| JE05 | MERCHANIVILLE-PENGEALINGS: | 3104642 | LCODBINE 1 | 395452 | 750307 | | 5.5 | 07 | 24 | 298 | EKTIFK | | 1000 | |
| | MERCHANTVILLE-PENNSALIGN | 3114563 | WOODBINE 2 | 395652 | 750307 | | 5.5 | 07 | 24 | 227 | GOR | | 1000 | |
| 5319 | WESTVILLE ECROLISH | 3103418 | 4 | 395221 | 750737 | F | 1.3 | 15 | 21 | 313 | GNA | | 750 | |
| | WESTVILLE ECROLOH | 3105689 | 5 | 395216 | 750739 | F | 1.4 | 15 | 21 | 274 | GOTR | | 1000 | 1 |
| | WESTVILLE BOROLIGH | 3117923 | 5 | 395224 | 750736 | F | 1.2 | 15 | 21 | 317 | GMR | | 1000 | |
| 5336 | DEPTECED TOUNGHIP MUA | 3105513 | 4 | 395115 | 750705 | | 2.6 | 15 | 02 | 363 | GOR | | 700 | |
| 5347 | WOODBLRY CITY WATER DEFT. | 5100100 | 3 | 395017 | 750928 | F | 4.0 | 15 | 22 | 188 | GKYR | | 700 | 9 |
| | WEIGHERY CITY WATER DEPT. | 3104059 | 5 | 394955 | 750908 | F | 4.3 | 15 | 22 | 457 | GOTE | | 1000 | |
| | WCGDBLRY CITY WATER DEFT. | 3307973 | 6 | 395037 | 750825 | F | 3.3 | 15 | 22 | 305 | BUR | | 1000 | |
| EUX 90 | BYFINER. JOHN & RUTH AND | 5100125 | WELL 1 | 395025 | 751015 | F | 4.1 | CO | 32 | 45 | GTCH | | 1000 | |
| | GARCHER, JOHN & RUTH ANN | 3213727 | WELL 2 | 395025 | 751015 | F | 4.1 | 05 | 32 | 87 | GTCH | | | |
| | BANDAER. JOHN & PUTH ALV | PERED 1 | PCRED 1 | 395025 | 751015 | F | 4.1 | 05 | 32 | 25 | GTCH | | | |
| GL0104 | NO LONGER FARMS | STREAM 1 | | 395027 | 751306 | U | 5.8 | 15 | | | | | | |
| 0.0122 | MARFALE, JOHN | MATTI-EXE DE: | FCND 1 | 395015 | 751104 | F | 4.7 | 15 | 20 | 2 | SD | | 1000 | |
| | MAPLE, JOHN | STREAM 1 | | 395015 | 751104 | par- | 1 4.7 | 157 | 20 | | ED | | 1000 | |
| | IS HART, CHATLES DR. | WOODELRY CREEK | STREAM 1 | 395023 | 751055 | F | ~4.5 | 15 | 20 | | SD | | | 1 |
| 520125 | DE HART PARTICIPS | EQ:D | 1 | 395032 | 751039 | M | 4.2 | 15 | 20 | 9 | SD | | 1000 | |
| | | | | | | | | | | | | | | |

MANAGE Of Observations: 135



THE FOLLOWING CODES DENOTE THE TYPE OF WELL OR SURFACE WATER INTAKE AS LISTED ON WATER WITHDRAWAL POINTS MAPS.

1000D - DEWATERING PERMIT OR TEMPORARY PUMPING PERMIT

2000 - INDUSTRIAL PERMITS, GOLF COURSES AND REMEDIATION PUMPING

PERMITS

- SURFACE DIVERSION AND SURFACE WATER INTAKES 4000

- PUBLIC WATER SUPPLY WELLS 5000

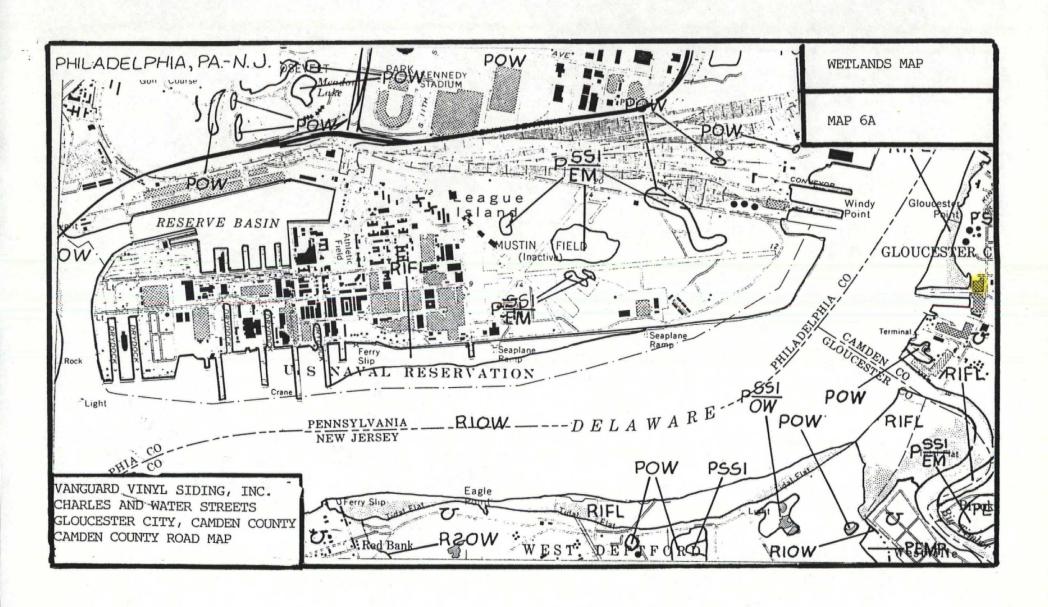
10000 - WELLS WITH THE CAPACITY TO PUMP >100,000 GALLONS BUT DO

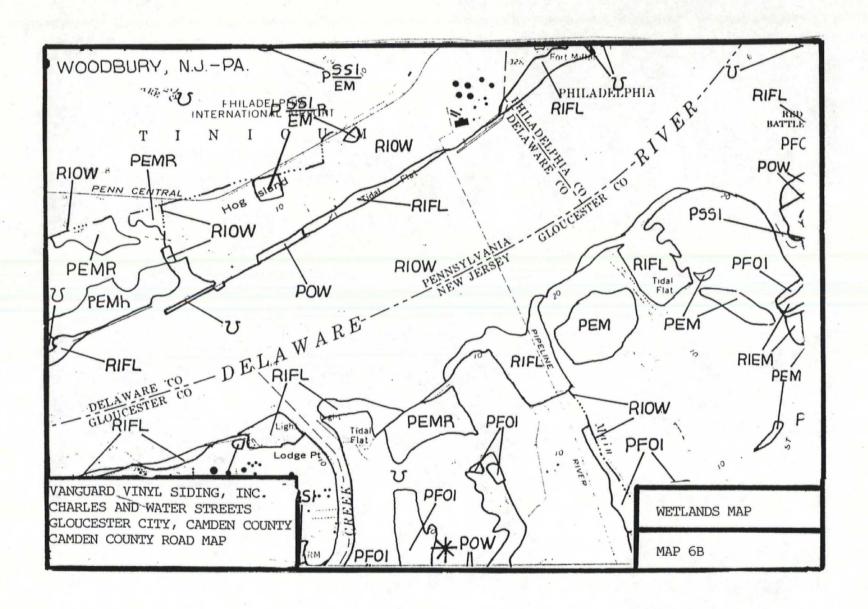
XX0000 - AGRICULTURAL CERTIFICATION, FIRST TWO LETTERS ARE THE FIRST TWO LETTERS OF THE COUNTY IN WHICH THE PERMIT IS

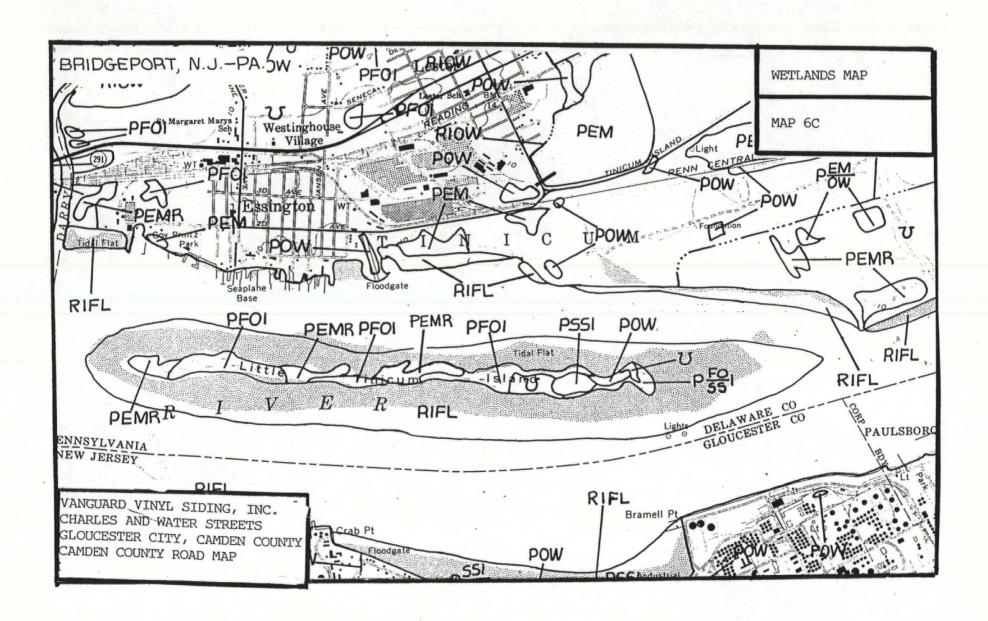
ISSUED.

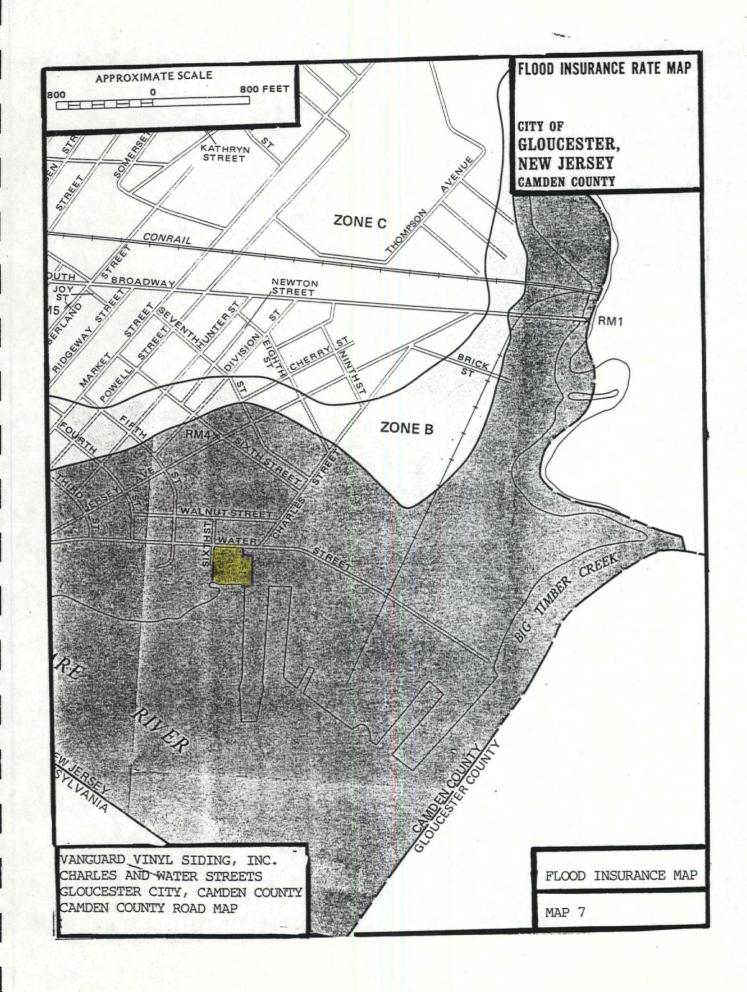
P - PRIVATE WELL

PS - PRIVATE SURFACE INTAKE









ATTACHMENT A

VANGUARD VINYL SIDING, INC.
Gloucester City, NJ

ECRA General Information and Site Evaluation Submissions

TO

BUREAU OF INDUSTRIAL EVALUATION
DIVISION OF WASTE MANAGEMENT
N.J. DEPT. OF ENVIRONMENTAL PROTECTION

September 1985



Engineers, Planners and Scientists

ATTACHMENT A-1

RECHIVED

SEP 16 10 09 AM 185

DIVISION OF WASTE HARACE HENT HSMA HISE

ECRA
GENERAL INFORMATION

AND

SITE EVALUATION
SUBMISSIONS

FOR

VANGUARD VINYL SIDING, INC. GLOUCESTER CITY, NEW JERSEY

SEPTEMBER 1985

BCM PROJECT NO. 00-4357-01







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SITE EVALUATION SUBMISSION

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Appendix 3 Description of Operations

Appendix 4 Inventory and Storage of Materials

Appendix 5 Sampling Plan

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5.2 Site Description

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5.6 Sampling Protocol

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Appendix 7 Decontamination Procedures

Appendix 8 Laboratory Quality Assurance/Quality Control Program



GENERAL INFORMATION SUBMISSION (GIS)

A-4

HAZARDOUS SITE MITIGATION ADMINISTR ON BUREAU OF INDUSTRIAL SITE EVALUAT.

ENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA) INITIAL NOTICE

GENERAL INFORMATION SUBMISSION (GIS)

This is the first part of a two-part application form. This information must be submitted within 5 days following public release of a decision to close operations or the signing of a sales agreement or option to purchase involving an Industrial Establishment as defined in N.J.S.A. 13:1K-6, the Environmental Cleanup Responsibility Act.

SUBMIT THE ORIGINAL PLUS TWO COPIES OF THIS COMPLETED FORM AND ANY ATTACHMENTS.

Please refer to instructions and N.J.A.C. 7:1-3.7(d) before filling out this form. Answer all questions. Please print or type.

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| | Street Address: | Charles and Water Str | eets | | | |
| | | Gloucester City | | NJ | Zip Code: | 08030 |
| | | Gloucester | | | | |
| B. | | 3B | | | | |
| | | al Classification (SIC) Numl | 20 | 79 | | |
| D. | Name: Sammuel | Property): Vanguard Viny Natal, Esq. | • | Tele | phone No.: (609 | 757-8100) 428-4600 |
| | Street Address: . | 807 Haddon Avenue | | | | |
| | Municipality: | Haddonfield | State: _ | NJ | Zip Code: | 08033 |
| E. | Name: Not in Firm: | of Industrial Establishment operation | | | • | · · · · · · · · · · · · · · · · · · · |
| | | | | | | |
| F. | Current Owner (Name: Not in | Business, if different from o | perator): | | phone No.: | , |
| | Street Address: . | | | | • | |
| | Municipality: | | State: _ | | Zip Code: | |
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| | Refer to | Appendix 1 | | · · · · · · · · · · · · · · · · · · · | ···· | |
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| Aut Nar | horized agen ne: Mr. Ed | t designated to v | work with the Depa | urtment: | : (See Appendix Telephone No.: 1- | 800-325-9590 |
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| | DISCHARGE ACTIVITY | DATE ISSUED OR DENIED | EXPIRATION DATE | BODY OF WATER DISCHARGED INTO |
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| United States Envector A | ironmental Protec Annual Report pre | tion Agency (EPA) Ide pared pursuant to the | entification Number a New Jersey Hazardou | nd copy of the most s Waste Regulations. |
| D # | | | | |
| s a copy of the A | nnual Report attac | ched? 🔲 Yes 🏾 🗷 | □ No | |
| All other federal, | state, local governi | mental permits. | | |
| · AGE: ISSUING | · · · · · | PERMIT NUMBER | DATE OF APPROVAL OR DEN | EXPIRATION DATE |
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| B. | |
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| | Date of Action |
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| | Description of the Violation |
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| | |
| | How was the violation resolved? |
| | 110 W Was the violation rootives. |
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| | |
| | purposes more fully described in Appendix 1. ITT Diversified Credit Corporation has never owned nor operated the subject facility. The information provided herein has been developed by BCM from available sources I have no reason to believe that any information provided in this application and any attachments is untrue. |
| | I am aware that rearing is a crime in this State. I am cognizant that providing false information is a violation under ECRA at I may be personally liable for penalties up to \$25,000 per day. |
| | |
| | |
| | Earl 98 Chan. |
| | Signature Signature |
| | Esw. L. ALEINBERG, JR |
| | Esw. L. ALEINBERG, JR. Name (Print or Type) |
| | EDW. L. ALEINBERG, JR |

Date

BOM

SITE EVALUATION SUBMISSION (SES)

DIVISION OF WASTE MANAGEMENT ZARDOUS SITE MITIGATION ADMINISTRAT BUREAU OF INDUSTRIAL SITE EVALUATION

ENVIRONMENTAL CLEANUP RESPONSIBILITY ACT (ECRA)

APPLICATION FOR ECRA REVIEW INITIAL NOTICE

SITE EVALUATION SUBMISSION (SES)

This is the second part of a two-part application submittal and must be submitted within 30 days following public release of the decision to close operations or execution of an agreement of sale or option to purchase.

| 1 | |
|---|--|
| Vanguand Vi | DATE 9-5-85 nyl Siding, Inc., A New Jersey corporation |
| NAME OF INDUSTRIAL ESTABLISHMENT undergoing | liquidation in the United States Bankruptcy Cou |
| ADDRESS Charles and Water Streets | |
| CITY OR TOWN Gloucester City | ZIP CODE08030 |
| MUNICIPALITY Gloucester | COUNTY Camden |
| | g, Inc. by its trustee, |
| NAME OF PROPERTY OWNER Sammuel Natal, Esq. | |
| FIRM: | |
| ADDRESS: 807 Haddon Avenue | ZIP CODE: 08033 |
| | |
| MUNICIPALITY Haddonfield | COUNTY LOURTY CAMDEN |
| IS THIS MAP ENCLOSED? | and processes at the industrial establishment organized to Department step-by-step through a plant evaluation, am where hazardous substances and wastes are generated, handled or disposed on site, above or below ground, scharge, septic systems if applicable, seepage pits and seed production prior to December 31, 1983; but are |
| | dix #3) □ NO |
| IF YOU HAVE CHECKED "NO", STATE THE REASON(S) | : |
| | |
| | |
| | |
| 1 | FOR DEP USE ONLY |

Notice No. _

| . A. | A description of the types, age (installation date), construction material, capacity, contents, and location of storage vessels, surface impoundments, landfills, or other types of storage facilities, including drum storage, containing hazardous substances or wastes. | | | | | | | | |
|---------------------------|--|--|---|--|--|--|--|--|--|
| | ARE THESE FACILITIES IDENTIFIED ON YOUR SITE MAP OR DESCRIBED IN A NARRATIVE REPORT? TO YES (See Appendix # 4) | | | | | | | | |
| | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): | | | | | | | | |
| | | | | | | | | | |
| В. | This may be accomp formance with Criter subsurface soil invest | lished in one of se rion 329 of the Na tigation (soil borin | everal ways: a) Performational Fire Protection As | s wastes or substances must nce of a satisfactory leak te sociation, or; b) Performa Excavate and remove the tar approved by the NJDEP. | st in con- nce of | | | | |
| | ARE THE RESULTS O YES (See Append | | CTION TEST OR THE SUBS I NO | URFACE INVESTIGATION EN | CLOSED? | | | | |
| | | برا رسیس | | re no underground tank | at the | | | | |
| | Vanguard Vinyl | Siding Company | plant. | | | | | | |
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| sub site and A a | estances or wastes general above and below grown wastes that will remaind N.J.A.C. 7:26-8 promaterial | erated, manufactu bund, and a descrip in on site. (Attac rior to completing | red, refined, transported, ption of the location, type the additional sheets if necessito ensure that all defined | treated, stored, handled or es and quantities of hazardo essary.) Review N.J.A.C. 7: d hazardous materials are incompared to the control of t | disposed on ous substances 1E, Appendix cluded. | | | | |
| sub site and A a | estances or wastes general above and below grown wastes that will remaind N.J.A.C. 7:26-8 promaterial | erated, manufactu bund, and a descrip in on site. (Attac rior to completing | red, refined, transported, ption of the location, type the additional sheets if necessito ensure that all defined | treated, stored, handled or es and quantities of hazardo essary.) Review N.J.A.C. 7: d hazardous materials are incompared to the control of t | disposed on ous substances 1E. Appendix cluded. TO REMAIN ON SITE | | | | |
| sub site and A a | estances or wastes general above and below grown wastes that will remaind N.J.A.C. 7:26-8 promaterial | erated, manufactu bund, and a descrip in on site. (Attac rior to completing | red, refined, transported, ption of the location, type the additional sheets if necessito ensure that all defined | treated, stored, handled or es and quantities of hazardo essary.) Review N.J.A.C. 7: d hazardous materials are incompared to the control of t | disposed on ous substances 1E. Appendix cluded. TO REMAIN ON SITE | | | | |
| sub site and A a | estances or wastes general above and below grown wastes that will remaind N.J.A.C. 7:26-8 promaterial | erated, manufactu bund, and a descrip in on site. (Attac rior to completing | red, refined, transported, ption of the location, type the additional sheets if necessito ensure that all defined | treated, stored, handled or es and quantities of hazardo essary.) Review N.J.A.C. 7: d hazardous materials are incompared to the control of t | disposed on ous substances 1E. Appendix cluded. TO REMAIN ON SITE | | | | |

F2 1 -

| 3. | A. | A detailed description, date and location on a scaled map of any known spin of discharge of hazardous substances or wastes that occurred during the historical operation of the site and a detailed description of any remedial actions undertaken to handle any spill or discharge of hazardous substances or wastes. (Attach additional sheets if necessary.) | | | | | | | | | |
|-----|----|--|--|--|--|--|--|--|--|--|--|
| | | IS THIS INFORMATION ENCLOSED? YES (See Appendix #) NO | | | | | | | | | |
| | | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): There is no record of known spills or | | | | | | | | | |
| | | remedial actions taken if a spill occurred. | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| • | | ARE THE SPILLS IDENTIFIED ABOVE INDICATED ON THE SCALED SITE MAP? YES X NO | | | | | | | | | |
| | | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): There were no spills identified above. | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 3. | B. | If this facility has an approved Spill Prevention Control and Countermeasure Plan (SPCC), enclose a copy with this submittal. | | | | | | | | | |
| | | IS YOUR SPCC PLAN ENCLOSED? YES (See Appendix #) NO, this facility is not required to have an SPCC plan | | | | | | | | | |
| 4. | A. | A detailed sampling or other environmental evaluation measurement plan which includes proposed soil. groundwater, surface water, surface water sediment, and air sampling determined appropriate for the site. (This sampling plan must be developed in conformance with ECRA Regulations N.J.A.C. 7:1-3.14 et seq., and Quality Assurance Guidelines as developed by DEP) | | | | | | | | | |
| | | ARE THREE COPIES OF THE SAMPLING PLAN ENCLOSED? YES (See Appendix # 5 & #E | | | | | | | | | |
| | | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 14. | B. | If the sampling plan includes groundwater sampling and/or the installation of monitoring wells, the applicant must complete a "Request for Hydrogeologic Assessment" form (blank form attached). | | | | | | | | | |
| | | IS GROUNDWATER SAMPLING PROPOSED? YES NO | | | | | | | | | |
| | | IS THE "REQUEST FOR HYDROGEOLOGIC ASSESSMENT" FORM ATTACHED? YES (See Appendix #) | | | | | | | | | |

ATTACHMENT ALL

Title

| | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): |
|----------|--|
| | There is no visible evidence of extensive contamination of areas at the site |
| | that would necessitate the initiation of a groundwater monitoring program. |
| | |
| 15. | A detailed description of the procedures to be used to decontaminate and/or decommission equipment and buildings involved with the generation, manufacture, refining, transportation, treatment, storage, handling, or disposal of hazardous wastes or substances including the name and location of the transporter, the ultimate disposal facility, and any other organizations involved. |
| | IS THE DEȚAILED DESCRIPTION ENCLOSED? 🖾 YES (See Appendix # _ 7) 🖂 NO |
| | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): |
| | |
| | |
| 16. | Copies of all previous soil, groundwater and surface water sampling results, including effluent quality monitoring, conducted at the site of the industrial establishment during the history of ownership/operation by the owner or operator. Also include a detailed description of the location, collection, chain of custody, methodology, analyses, laboratory, quality assurance/quality control procedures, and other factors involved in preparation of the sampling results. |
| | ARE HISTORICAL RESULTS ENCLOSED? |
| | IF YOU HAVE CHECKED "NO", STATE THE REASON(S): |
| | |
| | |
| | |
| 17. | List any other information you are submitting or which has been formally requested by this agency: |
| | No other information is being submitted. |
| th EC | This application is being submitted by ITT Diversified Credit Corporation for the purposes more fully describedin Appendix 1. ITT Diversified Credit Corporation has never owned nor operated the subject facility. The information provided herein has been developed by BCM from available sources. I have no reason to believe that any information provided in this application and any attachments is untrue. I am aware at false swearing is a crime in this State. I am cognizant that providing false information is a violation under CRA and that I may be personally liable for penalties up to \$25,000 per day. |
| | Edw-L. Deng-gr |
| | 9-5-85 EDW. L. TLEINGERG JR. |
| | Date Name (Print or Type) |



APPENDICES

A-15



APPENDIX 1
DISCUSSION OF INITIATING TRANSACTION
(GIS ITEMS 3, 4, 5)



DISCUSSION OF INITIATING TRANSACTION

Prior to December 31, 1984, the parties responsible for this industrial establishment had ceased operations and abandoned the premises. The record owner and operator is Vanguard Vinyl Siding, Inc., a New Jersey corporation that is being liquidated in the United States Bankruptcy Court. The principal and chief operating officer of Vanguard, Robert C. Walther, has also filed for protection under the United States Bankruptcy Code.

ITT Diversified Credit Corp. ("ITT"), the party making this submission, is the holder of a mortgage encumbering this establishment, which mortgage it wishes to foreclose. After being advised that the New Jersey Department of Environmental Protection ("DEP") viewed a foreclosure sale as a triggering event under the Environmental Cleanup Responsibility Act ("ECRA"), ITT found itself with no responsible parties who are legally obligated to comply with ECRA.

Due to its concern over the negative impact that a continuing ECRA compliance requirement would have on the bidding at a sheriff's foreclosure sale, ITT determined to explore the possibilities of obtaining a formal clearance from the ECRA requirements prior to that sale. This submission represents the efforts of an expert retained by ITT to formulate a sampling program acceptable to the DEP so that the establishment may be sold at foreclosure free of any continuing requirements under ECRA.

To our knowledge, however, no transaction has occurred to date that would trigger the ECRA compliance process. A foreclosure proceeding involving this establishment is currently pending in the Camden Superior Court. Under its present plan, ITT will await the outcome of this process before moving the foreclosure proceedings towards a sheriff's sale.

ITT wishes to emphasize that by filing this submission it is not assuming any responsibility for complying with ECRA in connection with this industrial facility and accordingly should not be construed as an owner or operator for purposes of ECRA.



APPENDIX 2
SCALED SITE MAP

Scaled Site Map



DESCRIPTION OF OPERATIONS

We have been advised that Vanguard Vinyl Siding, Inc. produced plastic siding for homes and other buildings. Since the site has been abandoned and Vanguard's operations discontinued, there is limited available documentation concerning the specifics of the manufacturing operations at this facility. However, based on evaluation of limited documentation, our knowledge of this type of operation and site visual observations, it is apparent that raw materials, including polyvinyl chloride resin, stabilizers and pigments, were delivered by truck or rail car. The resin was stored in silos and mixed with the stabilizers and pigments at the Blend Area. After blending, the mixture would be extruded in one of a total of six extrusion lines.

Various operations were present at the Vanguard plant in support of process operations. For example, a machine shop, die shop, electrical shop, millwright shop, and welding shop were maintained on the premises. A product quality control laboratory was also maintained.

Due to the lack of documentation traditionally available from a site with ongoing operations, the Sampling Plan, contained in Appendix 5, stresses a comprehensive approach to site sampling and selection of analytical parameters.



INVENTORY AND STORAGE OF MATERIALS

Documentation concerning the hazardous materials and wastes present at the Vanguard plant was limited. Table 4-1 presents an inventory of all materials, as determined during site inspection. The storage location of materials is also noted in Table 4-1. All materials are now stored in a random manner in Building 10 or on the drum storage rack as illustrated on the Scaled Site Map included in this appendix. In general, Vanguard used the following chemicals to produce plastic siding:

- 1. Polyvinyl chloride resin
- 2. Stabilizers
- 3. Plasticizers
- 4. Pigments
- 5. Various lubricating oils
- 6. Coolant oils



TABLE 4-1
VANGUARD VINYL SIDING INC.
GLOUCESTER CITY, NEW JERSEY

| Material | Quantity/ Container | Location | To Remain Onsite | | | | |
|---|------------------------|---|---------------------|--|--|--|--|
| Stabilizers | | | | | | | |
| IRGASTAB T-633 CIBA-GEIGY | 2 gallons | Building 10 | - No | | | | |
| Stanclere T-233-P Interstab Chemical | 8 30-gallon drums | Building 10 | No | | | | |
| Tin containing stabilizers M&T Chemical | 80 gallons | Building 10 | No | | | | |
| Sicostab R335 BASF | 60 gallons | Building 10 & Laboratory | No | | | | |
| Weston XP1673 Borg/Warner Chemicals | 15 gallons | Laboratory | No | | | | |
| Oils | | | | | | | |
| Heat Transfer Fluid 500 Union Carbide | 2 55-gallon drums | Building 10 | No | | | | |
| Thermolite 137 | 10 gallons | Building 10 | No | | | | |
| Gear oil Mobil | 3 55-gallon drums | Drum storage rack - Bldg. 1 | No O | | | | |
| Automatic Transmission Fluid Mobil | 1 55-gallon drum | Drum storage rack - Bldg. 1 | No O | | | | |
| DTE Light oil Mobil | 1 55-gallon drum | Drum storage rack | No . | | | | |
| Polyvinyl Chloride | | | | | | | |
| Powder | 50 900 1b boxes | Building 10 | No | | | | |
| Chips | 2 900 lb boxes | Building 10 | No | | | | |
| Phthalates (Plasticizers) | | | | | | | |
| Oi(ethyl-hexyl) phthalate | 2 55-gallon drums | Building 10 | No | | | | |
| Pigments | | | | | | | |
| Yellow titanium powder | 10 25-gallon drums | Building 10 | No | | | | |
| Various pigments containing iron and titanium | 16 10-gallon | Laboratory | No | | | | |
| <u>Unknown</u> | 3 55-gallon drums | Building 10 and drum storage rack | No | | | | |



SAMPLING PLAN

5.1 INTRODUCTION

The following sampling plan is designed to evaluate the potential for environmental concern at selected locations within the Vanguard Vinyl Siding Inc.'s (Vanguard) facility at Gloucester City, New Jersey. Soil sampling locations were chosen to provide information necessary for characterizing soil conditions resulting from operations at the site. The facility's history, initial sampling data, local geology and hydrogeology were considered in the design of the sampling plan. Upon completion of this soil sampling program, an evaluation of the potential for environmental concerns at sampled locations will be made. If locations of environmental concern are found, steps will be proposed to further define conditions at these locations or, if conditions are clearly defined, a cleanup plan will be developed.

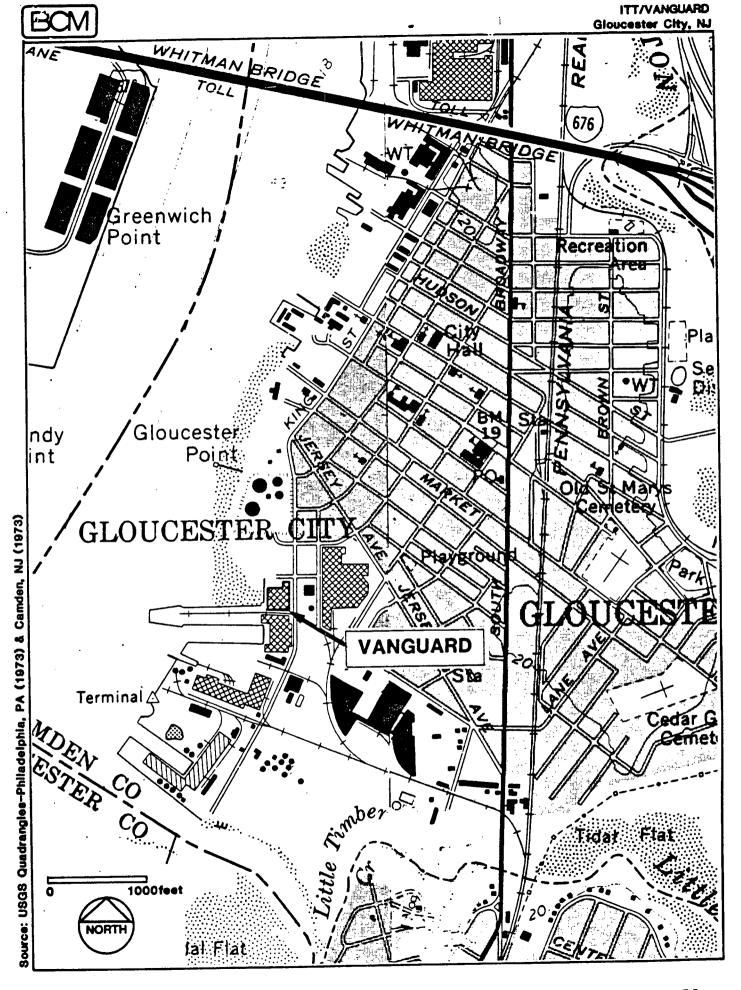
5.2 SITE DESCRIPTION

The Vanguard site is located on the Delaware River in Gloucester City, New Jersey as illustrated on the following USGS Location map. Several nearby industrial operations including a chemical manufacturer and oil storage facility are adjacent to the facility. The area is flat-lying, with several streams and marshes located in the vicinity. These streams and marshes are influenced by the tidal fluctuations of the Delaware River.

5.2.1 Geology

Physiographically the Vanguard site is near the western boundary of the Atlantic Coastal Plain province. The province is composed of a thick wedge of unconsolidated sediment overlying older consolidated bedrock.

The unconsolidated sediment formations range in age from Holocene to Cretaceous and consist of clay, silt, sand, and gravel of both marine and non-marine origins. These sediments are approximately 250 feet thick at the Vanguard plant site and thicken eastward towards the Atlantic Ocean. The underlying bedrock material is Cambrian to pre-Cambrian in age, outcrops in the Philadelphia area, and is called the Wissahickon Schist. Immediately below the plant and outcropping in the area are the Magothy and Raritan formations. These formations are predominantly continental in origin and were deposited largely by the actions of streams. The Raritan formation is composed of light-colored quartzose sand, clay, and some gravel. The Magothy formation consists of dark grey or black clay,





commonly lignitic, alternating with white micaceous fine sand. In the Gloucester City vicinity, it is difficult to distinguish between these two formations. Both formations dip at a relatively steep angle to the southeast.

5.2.2 Hydrogeology

The Raritan and Magothy formations contain aquifers which in the past supplied large quantities of water to the Gloucester County area. Most of the industries along the Delaware River and public water companies in the county at one time obtained water from these aquifers. However, saltwater intrusion has significantly reduced the use of these aquifers as a potable water source.

In the area of the Vanguard facility, two water-bearing zones (aquifers) have been identified in the Magothy and Raritan formations. The upper zone includes the upper 120 feet and the lower zone includes approximately the lower 200 feet of the formations. These two zones are separated hydraulically by clay beds. Coefficients of transmissivity for the lower zone have been reported to be 42,000 gpd/feet and for the upper zone 52,000 gpd/feet. Both zones have contained wells which can yield over 1,000 gpd.

The movement of water in these aquifers is influenced by industrial pumping on both sides of the Delaware River. The recharge for the aquifers prior to development was mainly from precipitation on outcrop areas. Currently a majority of the recharge appears to be coming from the Delaware River.

5.2.3 Hydrogeologic Assessment

The hydrogeologic setting for the area is such that Delaware River water has the potential to impact the groundwater beneath the Vanguard facility. Therefore, poor groundwater quality found in the area of the Vanguard facility may be unrelated to activities at this facility. The soil sampling program proposed for the Vanguard facility is designed to assess soil conditions in the upper soil zone (0 to 4 feet) at all areas considered to be of potential environmental concern. If conditions are detected in the upper soil zone which have the potential to impact groundwater, a groundwater sampling program will be proposed.

5.3 SITE MAP

The Scaled Site Map identifies all areas of potential environmental concern and some of the different storage areas at the Vanguard facility. The figure also identifies locations sampled during the initial characterization sampling and the proposed background sample location. A discussion of the initial characterization sampling is contained in Appendix 6 of the Site Evaluation Submission (SES).



5.4 SAMPLING LOCATIONS

Based on results from an initial sampling conducted at the site, three areas of potential environmental concern have been identified. These three areas and the initial sampling results are discussed in Appendix 6. This initial sampling and analytical effort was implemented because of limited avaiable documentation and the desire to determine areas of potential environmental concern. The sampling plan includes extensive sampling at each of these areas to characterize the extent and level of contamination. Following is an area by area description of proposed sampling. Table 5-1 sumarizes this material and lists the number of samples and sampling parameters recommended.

Area A is a truck loading and unloading area and the location of miscellaneous drum storage. This area was sampled during the initial round of sampling. The analytical results along with visual observations indicate that there may have been some accidental spills in the area. To adequately characterize this area it will be necessary to conduct six borings. Each of these borings will extend to the water table with samples retrieved continuously from 0.5 feet intervals. The borings will be conducted within the obviously stained area and around the perimeter of this area.

Area B is an area which received run-off from a drum storage rack inside the plant. A sample was collected in this area during the initial round of sampling. The results along with visual observation indicate that drums stored inside the plant have leaked and/or spilled with the run-off from these mishaps creating an area of potential environmental concern. To fully characterize both the extent and level of contamination in this area, four borings will be conducted to the water table. Samples will be retained continuous from each boring at 0.5 feet intervals. Again, the borings will be conducted within the stain area and around its perimeter.

Area C is an area of uncovered ground inside the plant, where PVC resins and pigments have been spilled. Samples were collected at various locations throughout this area during the initial round of sampling. The analytical results indicate that the area is essentially clean except for some elevated lead concentrations. Before this sampling plan is implemented there will be a general clean-up in this area. All spilled resins, pigments, and stabilizers will be removed and appropriately disposed. Following this removal, six borings will be conducted at selected points in the exposed ground area. Each boring will be continued to 3 feet with samples retained from 0.5 feet intervals.

Near the front of the plant there is an area of open land which appears relatively undisturbed. As part of the sampling plan, a 3-foot boring will be conducted in this area; sampled at 1-foot intervals.

Property Line

Scaled Site Map

ATTACHMENT A-27



TABLE 5-1
SUMMARY OF SAMPLING PLAN LOCATIONS
VANGUARD

| Area | Site Description | Material Managed | Sample Location | Minimum Number of Samples | Parameters | EPA Test Method* |
|------|---|---|--|------------------------------|--|----------------------------|
| A | Form Truck Loading and miscellaneous drum storage | PVC Resins and drums containing various materials | 6 Borings around former unloading and drum storage | 2 | Priority Pollutant + 45 Scan and Total Petroleum Hydrocarbons | PP+45**, 418.1*** |
| | stor age | various materials | area | 6 | Total Petroleum Hydrocarbons, Purgeable Aromatics, and Purgeable Halocarbons | 418.1, 5030, 8010, 8020 |
| В | Area Receiving Runoff | Various oils | 4 Borings in | 1 | Priority Pollutant + 45 Scan | PP+45, 418.1 |
| | from drum racks inside building | and solvents | runoff area | 4 | and Total Petroleum Hydrocarbons Total Petroleum Hydrocarbons, Purgeable Aromatics, Purgeable Halocarbons | 418.1, 5030, 8010, 8020 |
| C | Exposed ground inside building | PVC Resins and pigments | 6 Borings following initial cleanup | 6 | Barium, Cadmium, Chromium, Lead, Tin, and Titanium | 7080, 7090, 7190, 7420 |
| D | Background | | 1 Boring | 1. | Priority Pollutant + 45 Scan and Total Petroleum Hydrocarbons | PP+45, 418.1 |

^{*} See Test Methods for Evaluating Solids Waste, USEPA, SW-846 (July 1982).

^{**} The USEPA's toxic pollutant list covers 129 parameters. See generally Silva, USEPA, Moving to Control Industrial Toxic Pollutants With New NPDES Permits, Civil Engineering - ASCE, September 1981. The "plus forty-five" requirement refers to tentative identification of organic non-priority pollutant compounds based on a library search of 15 purgeable organics, 15 acid extractables and 15 base neutrals. See NJDEP Hazardous Site Industrial Survey and Feasibility Study Requirements, unpublished.

^{***} Method modified to include a soxhlet extraction at 20 cycles/hour for 4 hours, water extraction with MgSO4, and sample cleanup with silica gel.



5.5 ANALYTICAL PARAMETERS

The analytical parameters (Table 5-1) were chosen to best indicate the potential for environmental concern at each specific area. Site inspection data and initial sampling plan results have provided the basis for choosing particular parameters.

5.6 SAMPLING PROTOCOL

Soil samples will be obtained from the soil borings using the following protocol:

- 1. The hand augering and/or split spoon sampling device will be cleaned of sediment and then pressure cleaned with water and 50/50 methanol and distilled water prior to each use.
- The sampling device wil be used to sample the selected interval and then withdrawn to the surface and opened. The soil sample will be logged by a geologist and placed into a proper laboratory-prepared container.
- 3. The interval will be continuously sampled at each boring location to prescribed interval.
- 4. The soil sample will be delivered under chain-of-custody to either BCM's Norristown, Pennsylvania Laboratory or General Testing Corporation in Hackensack, New Jersey for analysis.

At area A, two composites will be prepared from the 0.5 to 1.0 feet interval from all borings taking equal aliquots from three samples to make one composite and equal aliquots of the remaining three to make the other. These composites will be analyzed for the Priority Pollutants plus 45 (PP+45). Three additional composites will also be prepared taking equal aliquots of the 3.0 to 3.5 foot interval sample from two samples per composite. These composites will be analyzed for purgeable aromatics, purgeable halocarbons (PA/PH), and total petroleum hydrocarbons.

Composites will be made by taking equal aliquots of the 0.5 to 1.0 foot interval from the four borings conducted in Area B with two samples per composite. These composites will be analyzed for PP+45. Two additional composites will be made by taking equal aliquots of the 3.0 to 3.5 foot sample again using two samples per composite. These composites will be analyzed for PA/PH and total petroleum hydrocarbons.



For Area C, a total of six composites will be prepared for analysis. Three composites will be composed of equal aliquots taken from the 0 to 0.5 feet sample using two samples per composite. The other three will be composed of equal aliquots taken from the 1.0 to 1.5 feet interval using two samples per composite. Each composite will be analyzed for barium, cadmium, chromium, lead, and tin.

The background sample will be composed of the 0.5 to 1.0 foot interval sample and will be analyzed for PP+45 and total petroleum hydrocarbons.

5.7 ANALYTICAL METHODOLOGY

All samples retained for analysis will be sent to BCM Laboratory Division, 521 West Germantown Pike, Norristown, Pennsylvania 19403 (NJDEP Certification No. 771715). Here all compositing and preparation for analysis will be conducted. Most of the analyses will be performed by BCM's Laboratory, however, gas chromotograph/mass spectrometer work will be subcontracted to a NJDEP certified laboratory and testing for petroleum hydrocarbons will be subcontracted to General Testing Company in Hackensack, New Jersey. For Laboratory Quality Assurance/Quality Control Program (QA/QC), please see Appendix 8.



APPENDIX 6

AREAS OF CONCERN AND INITIAL SAMPLING RESULTS



AREAS OF CONCERN AND INITIAL SAMPLING RESULTS

All areas where hazardous substances were handled and that may be of potential environmental concern are shown on the Scaled Site Plan and Table 6-1. The sites were chosen based on site inspection by BCM and a round of characterization sampling conducted by BCM.

Area A is a truck loading area on the north side of Building 3. Raw materials and finished product were received and shipped from this area. Two silos storing vinyl pellets are also located between the loading area and manufacturing building. Visual observations indicated evidence of minor spills. An initial round of sampling indicated the presence of phthalates and petroleum hydrocarbons in elevated concentrations.

Area B is located just outside of a door on the northeast side of the main building. This area would have received spillage from a drum storage rack located just inside the building. Both visual and initial sampling results confirm that spillage did occur in this area as evidenced by elevated petroleum hydrocarbon concentrations. It is therefore likely that drums of lubricating and other types of oils were stored in this vicinity.

Area C is located inside the plant and consists of an area of exposed ground surrounded by concrete flooring. Both visual observation of debris scattered in this area and the initial sampling results indicate spillage of PVC resins and pigments. The analytical results also reveal some elevated lead concentrations.

TABLE 6-1
AREAS OF POTENTIAL CONCERN

| Area | Site Description | Material Managed | Visual Evidence | Initial Sampling Results |
|------|---|--|---|--|
| A | - Truck loading and unloading of vinyl pellets and forms - Miscellaneous drum storage | PVC resins and drums containing various materials (solvents, oils) | Evidence of small spillage overtime from loading/unloading activities | Elevated phthalates, chloroethanes, and petroleum hydrocarbons |
| В | Area receiving runoff from drum racks inside building | Various oils and solvents | Stained ground evidence of minor spillage | Elevated chloroethanes, chloropropylenes, and petroleum hydrocarbons |
| С | Exposed ground inside building | PVC resins and pigments | Debris covering ground, ground stained | Elevated chloroethanes, lead concentrations |
| D | Background | | | No Preliminary Sampling |

ITT-VANGUARD. GLOUCESTER CITY, NEW JERSEY UNLOADING AREA A

| Parameter | BCM Sample No.: Sample Date: Average Depth (ft): | N504483 3/6/85 1.0 | • |
|---|--|--------------------------|---|
| (EPA Test Method) | Description: | | |
| Phthalate Esters mg/kg (8060) | | | |
| DiMethyl Phthalate | | <1.54 | |
| Diethyl Phthalate Dibutyl Phthalate | | <1.31 <0.91 | |
| Butyl Benzl Phthalate | | <0.91 | |
| Di-(ethyl hexyl) phthalat Di-N-Octyl phthalate | e | 7.56 11.5 | |
| Volatile Organics mg/kg (8010 & 8020) | | | |
| Chloromethane | | <0.01 . | |
| Bromomethane Vinyl chloride | | <0.01 <0.01 | |
| Chloroethane | | <0.01 | |
| Methylene chloride | | <0.01 | |
| Trichlorofluoromethane 1,1-Dichloroethylene | | <0.01 <0.01 | |
| 1,1-Dichloroethane | | <0.01 | |
| trans-1,2-Dichloroethylen | e | <0.01 | |
| Chloroform 1,2-Dichloroethane | | 0.02 1.08 | |
| 1,1,1-Trichloroethane | | <0.01 | |
| Carbon Tetrachloride Bromodichloromethane | | <0.01 <0.01 | |
| 1,2-Dichloropropane | | <0.01 | |
| trans-1,3-Dichloropropyle | ne | <0.01 | |
| Trichloroethylene Dibromochloromethane | | <0.01 <0.01 | |
| 1,1,2-Trichloroethane | | <0.01 | |
| cis-1,3-Dichloropropylene | | <0.01 | |
| Bromoform 1.1.2.2-Tetrachloroethane | | <0.01 <0.01 | |
| Tetrachloroethane | •• | 0.70 | |
| Chlorobenzene | | <0.01 | |
| Benzene Toluene | | <0.01 <0.01 | |
| Ethylbenzene | | <0.01 | |
| 1,2-Dichlorobenzene | | <0.01 | |
| 1,3-Dichlorobenzene 1,4-Dichlorobenzene | | <0.01 <0.01 | |
| Metals mg/kg | | | |
| Arsenic (7060) | | 2.72 | |
| Barium (7080) | | 35.1 | |
| Cadmium (7090) | | 0.70 20.1 | |
| Chromium (7190) Mercury (7470) | | 20.1 0.633 | |
| Lead (7420) | | 0.109 | |
| Selenium (7740) | | <0.009 | |
| Silver (7760) | | <0.17 | |
| Total Petroleum Hydrocarb | on mg/kg (418.1*) | 9,080 | |

^{*} Method modified to include soxhlet extraction @ 20 cycles/hr for 4 hrs., water extracted with MgSO4, and sample cleanup with silica gel.

Source: BCM.



TABLE 6-3

ITT-VANGUARD. GLOUCESTER CITY, NEW JERSEY

STAINED AREA NEAR DRUM STORAGE AREA B

| BCM Sample No.: Sample Date: Parameter Average Depth (ft): (EPA Test Method) Description: | N504482 3/6/85 1.5 Soil |
|--|---|
| Volatile Organics mg/kg (8010 & 8020) | |
| Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride Trichlorofluoromethane 1,1-Dichloroethylene 1,1-Dichloroethylene 1,1-Dichloroethane trans-1,2-Dichloroethylene Chloroform 1,2-Dichloroethane 1,1,1-Trichloroethane Carbon Tetrachloride Bromodichloromethane 1,2-Dichloropropane trans-1,3-Dichloropropylene Trichloroethylene Dibromochloromethane 1,1,2-Trichloroethane cis-1,3-Dichloropropylene Bromoform 1,1,2,2-Tetrachloroethane Tetrachloroethane Chlorobenzene Benzene Toluene Ethylbenzene 1,2-Dichlorobenzene 1,3-Dichlorobenzene 1,3-Dichlorobenzene 1,4-Dichlorobenzene | <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 <0.01 |
| PCB ug/1 (8080) | <9.0 |
| Total Petroleum Hydrocarbon mg/kg (418.1*) | 15,800 |

^{*} Method modified to include soxhlet extraction @ 20 cycles/hr for 4 hrs., water extracted with MgSO4, and sample cleanup with silica gel.

Source: BCM.

ATTACHMENT B

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8251 Maryland Avenue Clayton, Missouri 63105 (314) 725-2525

April 21, 1986

Ms. Chris Hylemon
New Jersey Department of Environmental Protection
Division of Waste Management
Hazardous Site Mitigation Administration
Bureau of Industrial Site Evaluation CNO28
Trenton, NJ 08625

RE: Vanguard Vinyl Siding, Inc.
Charles & Water Streets: Glouchester City;
Camden County; ECRA Case No. 85569

Dear Ms. Hylemon:

As neither owner nor operator of the above referenced subject, ITT Commercial Finance came forward to expedite the ECRA process prior to foreclosure. Accordingly, as provided for in Appendix 1 of the General Information Submission, ITT Commercial Finance initiated submission prior to any ECRA triggering event, and without assuming any liability for completing the ECRA process, at this point we have chosen not to complete the ECRA process.

Thank you for your cooperation in closing this matter.

Sincerely,

Edw. L. Kleinberg, Jr.

Account Manager

ELK:11g0400Y

cc: Ed Hogan

ATTACISTENT 10-

ATTACHMENT C

NEW JEL JEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

INCIDENT NOTIFICATION REPORT

| TRENTON DISPATCH | 🗷 DIV. OF WASTE MANA | GEMENT DIV. OF E | NVIR. QUALITY To | IV. OF WATER RESOURCES |
|---|---|-----------------------------------|---------------------|-------------------------------|
| □ HQ FIEL | D OFFICE: | _ | | THERN TOM +BRUCE |
| DATE 0,7,08,.2 | 71ME (Military) (0 ,8,0) | REC'D 1461 | PHOI | NE <u>859-295</u> 8 |
| INCIDENT REPORTED | BY: | CASE NO. <u>8</u> 6 | 0708 | .02 s |
| NAME ANTH | ONY MCMAHON | thru BRUCE VE | NNER PHONE 63 | 3 - 71 <i>4</i> 1 |
| | | UM/HSMA) | | |
| | RENTUN | TRIAL | STATE | 7 |
| AFFILIATION | BUREAU OF, SI | TE EVALUATIO | N CONTACT - | - CHRISTINE, |
| NATURE OF INCIDENT EMERGENCY: [COMPLAINT: [OTHER: [| [: □ FIRE □ EXPLOSION □ □ SMOKE □ ODORS □ DI □ | □ DRUMS 🎾 SPILL UST 🗀 SEWAGE [| DERAILMENT D | MUA AL DUMPING |
| NAME (Site) | ANGUARD VINYL | - SIDING-, M | YGNR PHONE (609) | 428-4600 807 HADDON AVE |
| 31KE2131 | i will ten | 3/3. | | HADDONFIELD, NJ |
| CITY GLOUC | ESTER CITY COUN | TY CAMDEN | STATE NJ | _ ZIP CODE <u>08030</u> |
| STATUS AT SCENE OF POSSIBLE (DRU | INCIDENT: GROUNDS | IN CERTAIN A | CONTAMINATED | BY SPILLAGE - |
| | | DATE OF INC | | L TIME: L L |
| ANYONE HOSPITAL AREA EVACUATED CONTAMINATION O PUBLIC EXPOSURE RECEIVING WATER WIND DIRECTION | YES ZÖNO F AIR ZÖLAND I | FIREMA WATER ASSIST. | AT SCENE Y | ES ZENO ES ZENO ES ZENO |
| SOURCE OF INCIDENT/ | • • | | PHONE | |
| CONTACT | | Т | TLE | |
| STREET | | | | |
| CITY | COUNT | | STATE | ZIP CODE |
| IDENTITY OF SPILLED | AND/OR DISCHARGED SUBS | | | |
| NAME OF SUBSTANC | E PETROLEUM PI | RODUCTS + P | 1551BC OTHER | HAZ - SUBSTANCES, |
| | AMT. UNK | A/P/E SUBS | TANCE CONTAINED Y | ES NO MUNKNOWN |
| OFFICIALS NOTIFIED. | (A-310) | • | | |
| HEALTH DEPT .: PER | ison <u>Secretary</u> | CCHD | PHONE 757-86 | 0D DATE 7-8-86 |
| LOCAL MUNIC.: PEF | RSON | | PHONE | DATE |
| INCIDENT REFERRED TO | | | □ F&G □ BAPC [| 7000 |
| 1. PERSON | /AN HORN / RO | utine | PHONE 859-295 | 8 DATE 7-8-86 |
| 2. PERSON | | | PHONE | DATE |
| COMMENTS: | | • | | |
| <u>unknow</u> | n if ochd wi | ll cend som | eme out. | |
| · | *************************************** | | | |
| | | | | |
| COPIES: | White - File | Yellow - Trenton Dispatch | Pink - DWM Enforce | oment |

Pink - DWM Enforcement
ATTACHMENT B-

ATTACHMENT D

3.

CAMDEN COUNTY DEPARTMENT OF HEALTH

MEMORANDUM

Date <u>July 15, 1986</u> Comp. # 0708-L

TO: File

FROM: Robert Lentine, Sr.S.I.

SUBJECT: Vanguard Vinyl Siding Co. Inc. Gloucester City N.J.

An inspection was conducted at the interior and exterior of Vanguard Vinyl Siding Co. at Charles and Water Sts. in Gloucester City. This plant use to manufacture vinyl Siding but is presently bankrupt and the building appears to be abandoned. The following was noted concerning potentially hazardous toxic materials.

Inside)

A considerable volume of apparent plastic resin material which was stored in open boxes labeled (acetominophen powder), was noted. Several containers and bags of dye products were observed in containers and spilled onto the floor.

Several unlabeled containers or 55 gallon drums were observed (app 20). Several 55 gallon drums of a product called thermolite were observed. Conducted inspection with David Sweeney. Discussed findings with N.J.D.E.P. Mike Hanson. 10-55 gallon drums of light weight oils, solvents heat transferring fluids and auto transmission fluid were observed. In a small lab area app. (1000 ml.) bottles of trichloroethane, methylene cloride and cyclohexanone were observed. Several containers of material dye or chemicals were observed which lacked identifying labels. Dye materials were spilled onto the floor.

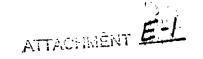
A 55 gallon drum of asbestos insulation was noted. Anapp. 20 gallon container of material marked corrossive was observed laying on the floor near a floor drain. There was some evidence of leakage.

Outside:

3-55 gallon drums of unlabled material were observed with some evidence of leakage at the bung holes. 1-55 gallon drum of material, unlabeled, was noted with out a bung cap. Several drums (6to8) were empty or had expanded and ruptured at the seams. see back for a rough map.

RL/ic (Signature)

cc: Gloucester City BOh-MGB N.J.D.E.P.



ATTACHMENT E

DIVISION OF WASTE MANAGEMENT 120 ROUTE 156, YARDVILLE, N.J. 08620

NOTICE OF VIOLATION

| ICNO. 86-07-08-023 DATE |
|--|
| VANGUARD WINYL SIDING INC. |
| LATION OF FACILITY CHARLES + WATER STS., GLOCESTER CHARLES |
| NE OF OPERATOR KERM INVESTMENT CO. P.O. BOX 506, MANVILLE, N. J. 08835 |
| You are hereby NOTIFIED that during my inspection of your facility on the above date, the following blation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 3:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility. |
| DESCRIPTION OF VIOLATION (NJSA 58:10-23.11, c+e) discharging of a |
| whous substance and failure to notify NJDEP |
| |
| |
| _ |
| |
| |
| |
| Remedial action to correct these violations must be initiated immediately and be completed by |
| Remedial action to correct these violation fifteen (15) days of receipt of this Notice of Violation, you |
| Remedial action to correct these violations must be initiated init |
| you have taken to attain compliance. The issuance of New Jersey, or any of its agencies from initi- violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initi- ating further administrative or legal action, or from assessing penalties, with respect to this or other |
| ating further administrative or legal action, or not assessing the state of \$25,000 per violation. violations. Violations of these regulations are punishable by penalties of \$25,000 per violation. |
| JERSEY DEPT. OF ENVL PROT. Jennis E-Ventor |
| SOUTHERN FIELD OFFICE RT. 70 + RED LION CIRCLE Tovestigator, Division of Waste Management Department of Environmental Protection |
| |

| INVESTIGA | ATION |
|--|--|
| CSE #: 86-07-08-025 [INITII | 92) DWM FILE #: 04-14-# |
| | TIME ARRIVED: 1120 |
| I VESTIGATOR: DENNIS E, VAN HORN | DATE: <u>9-4-86</u> TIME DEPARTED: <u>1230</u> |
| LOCATION: VANGUARD VINYL SIDING, INC- | PROPERTY OWNER: VANGUARD VINYL |
| ADDRESS: CHARLES + WATER STS. | MAILING ADDRESS: CO RERM INVESTMENT CO. |
| GLOUCESTER CITY County CAMDEN | P-0-130X 506 MANVILLE, NJ 08835 |
| BLOCK:LOT: | RESPONSIBLE PARTY Same |
| I CATION TELEPHONE #: NONE | ADDRESS: 19.0. 130X 69 |
| EPA ID #: | MANVILE, NJ 08835 |
| I CAL HEALTH DEPT. REP. ROBERT LENTINE, | |
| ORIGIN OF COMPLAINT: ANTHONY MEMAHON | ECRA) TELEPHONE #: 633-7141 |
| TURE OF COMPLAINT: ABANDONED FACTORY | |
| PROTOGRAPHS TAKEN: No | |
| FINDINGS: <u>ON 9-4-86 AT 1120 I</u> | |
| ROBERT LENTINE OF THE CAM | |
| MR. LENTINE WAS IN THE PROCES | |
| THE FRONT GATE THROUGH AT | |
| OF THE G.A.F. CORP DIRECTLY A | |
| | GATE (MR. LENTINE + MYSELF ONLY) |
| AND PROCEEDED TOWARD ONE OF | |
| STREET - THIS DOOR LED TO THE | |
| #10 (AS ALL ON SITE MAP INDI | |
| WE WERE THEN POSITIONED IN | |
| BLDG #10 - THIS ROOM CONT BLDG #10) LARGE 4'X4'X4' BOXE | |
| | |
| STHER MATERIAL IN THE SOUT | H + WEST END OF THIS ROOM |
| | FIED MATERIAL POWDER SEVERAL |
| OF WHICH WERE BROKEN OPEN | · |
| FLOOR - SOME OF THESE COULD | |
| PRUMS OF UNIDENTIFIED MATE | |
| | AS THE DOORWAY INTO THE |
| DRUM STORAGE AREA" WHICH W | |
| | SUS 55-GAL. DRIIMS OF WHICH |
| a weke. | ES APPEARED TO BE DIFFERENT |
| | TAGE MAY HAVE OCCURED IN |
| THIS AREA - ALSO IN THIS AREA | |
| • WMO | Dennis E. Van Hom |
| Supervisor Signature | 1 Investigator Signature |



INVESTIGATION

CASE # <u>86-07-08-02</u>5 DATE: 9-9-86

DINGS AND SUMMARY:

COURTYARD - TYPE AREA. WATER IS ALSO LEAKING IN THIS ROOM, ON THE WEST SIDE OF THE DRUM STORAGE ROOM, A DOUR INTO MANUFACTURING BUILDING #3 - THIS LARGE BLDG MOSTLY EMPTY, CONTAINS A DOCK LOADING AREA LEAKING DRUMS, SOME OF WHICH ARE MARKED "CORROSNE" THERE ARE SEVERAL AREAS OF SPILLED MATERIAL WHICH

THE WEST SIDE OF BLDG #3 HAS A ROOM PREVIOUSLY SED AS A LABORATORY - THERE ARE SEVERAL CONTAINERS OF CHEMICALS AND DYES BOTH CONTAINED AND SPILLED ALL CHER THE ROOM.

THE EAST SIDE OF THE ROOM HAS ENTRANCE TO AN AREA THAT ALSO CONTAINS VARIOUS DRUMS WHICH ARE ALSO

TO THE NORTH SIDE OF BLDG #3 ARE TWO ENTRANCES THE QUISIDE PROPERTY WHICH BORDERS 6th STREET AND THE DELAWARE RIVER - WE EXITED THROUGH THE ELECTRIC ROOM OUT INTO THE NORTH YARD AREA - THERE ARE THREE SILOS CONTAINING WHAT APPEARS TO BE DIFFERENT FOR DYE MATERIALS, THERE IS SOME SPICIAGE ON THE PHALT AROUND THE EXTERIOR OF THE SILOS - ALL ALONG THE NORTH FENCE THERE NUMEROUS UNLABELED DRUMS; SOME 2171 MATERIAL, OTHERS EMPTY, AND SOME EMPTY WITH BULGING AND BOTTOMS. - OBSERVATIONS OF SOIL SHOWED EVIDENCE SPILLAGE.

AT THIS POINT WE REENTERED BLOG #3 PETRACING STEPS + EXITED THE PLANT THE SAME WAY WE ENTERED. AFTER A BRIEF DISCUSSION WITH MR. LENTINE WE THE SITE AND PROCEEDED TO GLOUCESTER CITY HALL OBTAIN AS MUCH INFORMATION AS POSSIBLE ON OWNERSHIP

THE PROPERTY IS LISTED AS: VANGUARD VINYL, WATER ST. KERM INVESTMENT CO., SALES + ADMINISTRATION BLDG, MANVILLE, N.J. 08835 COPIES: White - DWM File

H

EN 7

NEW JEI DEPARTMENT OF ENVIRONMENTAL PROTEC N DIVISION OF WASTE MANAGEMENT

Page 3 of 4

INVESTIGATION

CASE # 86 - 07 - 08 - 02 S
DATE: 9-9-86

| DATE: 7-7-36 |
|---|
| IL NGS AND SUMMARY: |
| AT THIS POINT WE WERE ASKED TO MR JAMES DEVEREAUX, WESTER CITY TREASURER - WE EXPLAINED WHY WE WERE |
| THERE AT THE FACTORY AND WHAT WE FOUND IN OUR |
| LESTIGATION - WE WERE INFORMED THAT VAGUARD VINYL, INC. |
| HAD ALREADY FILED FOR BANKRUPTCY, BUT THAT BY LAW |
| THEY WERE STILL RESPONSIBLE FOR THE PROPERTY - GLOUCESTER |
| CITY HAS/HAD INTENTIONS OF FORCLOSING ON THE PROPERTY |
| THE TO OWED BACK TAXES - THIS MAY CHANGE IN LIGHT OF ENVIRONMENTAL CLEAN-UP RESPONSIBILITIES - MR-DEVEREAUX |
| DIP NOT KNOW OF A PERSON TO CONTACT AT VANGUARD |
| THE KERM INVESTMENT CO I INFORMED HIM THAT |
| THE RESPONSIBLE PARTY/SWILL HAVE ACTION TAKEN AGRINST |
| LEM BY D.E.Y. / DHWM/SEO HND THAT I WAULD CONTACT HIM |
| CONCERNING SFO FUTURE ACTIONS AND/OR PLANS. |
| WE SECURED THE OFFICE (TAX) AT APPROXIMATELY |
| ■ DEUD |
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INVESTIGATION

CASE # 86- 07- 08-02 5

DATE 9-9-86

| RECOMMENDATIONS AND CONCLUSIONS: | |
|--|-----|
| THE SITE OF THIS INCIDENT IS IN IMMEDIATE NEED | |
| OF CLEAN-UP - I HAVE ISSUED A NOV. WITH ATIME | |
| -IMIT. FUTURE PENALTIES WILL DEPEND ON SPEED OF | |
| CLEAN-UP AND COOPERATION WHICH CANNOT BE ESTABLISHED | , , |
| Now. | |
| I RECOMMEND FURTHER ACTION WHEN FUTURE | |
| NEED ARISES | |
| (OSVH) | |
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COPIES:

Supervisor Signature

White - DWM File

-Yellow - Local Health Dept.

Pink - Investigator Translation E

Investigator Signature



State of Nem Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS WASTE MANAGEMENT

John J. Trela, Ph.D., Acting Director RD 1, Route 70 Vincentown, N.J. 08088 609 - 859 - 2958

December 16, 1986

Kerm Investment Company P.O. Box 506 Manville, NJ 08835

Re: Vanguard Vinyl Siding, Inc., Charles & Water Streets, Gloucester City, NJ B-110 I-3B

Dear Sirs:

On September 4, 1986 a site investigation was performed jointly by this department and the Camden County Health Department. This investigation has revealed hazardous substances improperly stored onsite in such a manner as to be a potential threat to the environment and the health and safety of the citizens of Gloucester City.

On November 11, 1986 a Notice of Violation was sent. As of this date there has been no response. You are hereby directed to contact this department concerning a remedial clean-up within ten (10) days of the receipt of this notice. Failure to comply will result in the proper legal action and proceedings by this department.

Sincerely, Dennis E. Van Houn

Dennis E. Van Horn

Environmental Technician

DEVH:slv

cc: William Dunfee

Robert Lentine, Camden County H.D.

James Devereaux, Treasurer, Gloucester City

case file

ATTACHMENT F

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INVESTIGATION (follow-up)

Page 1 of 3

CASE #: 85-07-08-025

INVESTIGATOR: Armand J. Minardi LOCATION: Vanguard Vinyl Siding ADDRESS: Charles and Water Streets Gloucester City

COUNTY: Camden

PHOTOGRAPHS: none

BLOCK: 110

LOT: 3.b

LOCATION TELEPHONE: none

EPA ID #: none LOCAL HEALTH REP: Robert Lentine

COMPLAINANT: Anthony McMahon (ECRA)

FILE #: 04-14-12 PAC #: M-95

DATE: 11-03-88

TIME: in- 0950 out- 1035

OWNER: Vanguard Vinyl Siding

ADDRESS: c/o Kerm Investment Co.

P.O. Box 506

Manville, NJ 08835

RP: same

ADDRESS: P.O. Box 69 (alternate)

Manville, NJ 08835

TELEPHONE: 757-8600

TELEPHONE: 633-7141

NATURE OF COMPLAINT: Abandoned factory with drums and spillage on site

SAMPLE #1 none

FINDINGS:

0950: I arrived at the Vanguard Vinyl Siding site and met with Robert Lentine of the Camden County Department of Health. A security attendant from the adjoining GAF facility assisted us with gaining access to the Vanguard site. Lentine and I inspected the interior and exterior of the abandoned vinyl siding factory and observed the following:

- containers of methylene chloride and TCE stored in the lab area
- 10 drums of various types of petroleum products, such as gear and light oil, automatic transmission fluid, "safety solvent", stored in building #10 drum storage rack
- numerous boxes containing titanium pigments, phthalates (Tenneco mfg.), polyvinyl chloride resins in building #10
- other substances, such as Thermolite 137, were evident in building #10
- various types of solid wastes were present in all buildings and outside areas
- 15 drums stored outside and north of building #3; one drum half filled with a light oil, two drums filled with an unknown substance, and the remaining drums appeared to be empty

INVESTIGATOR SIGNATURE

INVESTIGATION

Page 2 of 3

CASE #: 86-07-08-02s DATE: 11-03-88

SUMMARY:

- the contents of the storage silos north of building #3 was unknown
- it was difficult to determine if the soils were contaminated with hazardous substance during this inspection

Lentine stated that with the exception of the removal of one drum of corrosive material (at the loading dock, building #3), this site has not changed since his last inspection in 1986. Lentine also stated that the site operators could be engaged in bankruptcy proceedings.

1035: Lentine and I departed the Vanguard site.

1055: I arrived at the Gloucester City Municipal Building at 512 Monmouth Street and met with Mrs. Harker, city clerk. I obtained block and lot information as well as addresses for the responsible party section listed above. Also, the bankruptcy proceedings for Vanguard Vinyl Siding were filed on 11-04-83, case #83-00285. An interested party in this case is Mr. Kleinberg, ITT Commercial Financial Corp., 8251 Maryland Ave., Clayton, Mo. 63105.

I met with Mr. Halbert, Gloucester City Administrator, to further discuss the Vanguard Case. Mr. Halbert had no additional information, however he will advise the DHWM if new information becomes available.

1116: I departed the Gloucester City municipal site.

ANTAGINETA-2.

INVESTIGATOR SIGNATURE

SUPERVISOR SIGNATURE

INVESTIGATION

Page 3 of 3

CASE #1 86-07-08-025 DATE: 11-03-88

RECOMMENDATIONS AND CONCLUSIONS:

The Vanguard Vinyl Siding site has remained essentially unchanged since 1985. According to existing documentation, the owner of record of this facility is Vanguard Vinyl Siding, Inc., a New Jersey corporation that is being liquidated in the United States Bankruptcy Court. ITT Diversified Credit Corporation (ITT) is the holder of a mortgage encumbering the Vanguard site. Initially ITT wanted to foreclose on the site, however to do so would trigger ECRA. ITT had no responsible party which could comply with ECRA. ITT withdrew its foreclosure thereby making ECRA no longer applicable.

An ECRA General Information and Site Evaluation Submission prepared by BCM (September, 1985, project no. 00-4357-01) was submitted by ITT (see case file).

Attached to this investigation is table 4-1 (list of substances) and a site map from the BCM report.

Recommendations: an additional investigation is needed to determine the status of the bankruptcy proceedings and potential responsible parties.

SUPERVISOR SIGNATURE

INVESTIGATOR SIGNATURE

INVESTIGATION (follow-up)

Page 1 of 1

CASE #: 86-07-08-02s

INVESTIGATOR: Armand J. Minardi LOCATION: Vanguard Vinyl Siding

ADDRESS: Charles and Water Streets

Gloucester City

COUNTY: Camden

BLOCK: 110

LOT: 3. b

LOCATION TELEPHONE: none

EPA ID #: none

LOCAL HEALTH REP: Robert Lentine COMPLAINANT: Anthony mcManon (ECRA)

NATURE OF COMPLAINT: Abandoned factory with drums and spillage on site

PHOTOGRAPHS: none

DATE: 5-23-91

TIME: in-1255 out-1355

OWNER: ITT Commercial Financial Corp

ADDRESS: 8251 Maryland Ave.

FILE #: 04-14-12 PAC #: DQA

Clayton, Missouri 63:05

(314-725-2525)

RP: Vanguard Vinyl Siding

ADDRESS: c/o Kerm Investment Co.

Manville, NJ 08835

SAMPLE #: none

TELEPHONE: 757-8600 TELEPHONE: 633-7141

FINDINGS: 1255: I arrived at the Vanguard Vinyl Siding site and met with John Wright, site custodian and part-time employee of GAF corporation whose abandoned facility adjoins the Vanguard site. Mr. Wright and I gained access to the Vanguard site to conduct a general inspection. A tour of the main production areas, lab and offices revealed that essentially no change had taken place since the inspection of 11-03-88 (see report of that date). An inspection of the outside grounds revealed no noticeable change. Approximately 15 drums were observed north of the storage silos, however these drums were noted in the previous inspection. According to Mr. Wright, vandals have caused much damage as evidenced by numerous broken windows and disruption of the materials (paper, vinyl siding, boxes, etc.) which were stored inside the building. With the exception of the Mayor of Gloucester City, no other party has shown interest in the Vanguard site.

1355: I departed the site.

<u>CONCLUSIONS AND RECOMMENDATIONS:</u> The Vanguard Vinyl Siding site has remained essentially unchanged since 1985. The ECRA report of 1985 details the site with respect to the substance stored therein.

It is recommended that an AO be issued to the RP/property owner.

INVESTIGATOR SIGNATURE

ATTAOLINEAT U

SUPERVISOR SIGNATURE

ATTACHMENT G

-

RAVIN, SARASOHN, COOK, BAUMGARTEN, FISCH & BAIME

COUNSELLORS AT LAW

DAVID N. RAVIN*

JEFFREY H. FISCH**

MARK BAUMGARTEN

JOSEPH L. COOK

PETER R. SARASOHN*

ROBERT A. BAIMEO

BERNARD SCHENKLER*

KENNETH A. ROSEN*

JONATHAN I. RABINOWITZ*

IO3 EISENHOWER PARKWAY

ROSELAND, NEW JERSEY 07068-1072

(201) 228-9600

CABLE ADDRESS "DARIM"

TELECOPIER: (201) 228-9250

PAUL KIZEL*
RICHARD D. TRENK
SHARON L. LEVINE
MITCHELL B. SEIDMAN*
IRA M. LEVEE*
BRUCE BUECHLER*
MICHAEL L. KONIG*
JOHN K. SHERWOOD
IRENA M. GOLDSTEIN
ROBIN J. KANTOR*

*N.J. AND NEW YORK BARS
**N.J. AND FLORIDA BARS
*N.J., N.Y., MA, & ME BARS

N.J., N.Y., & FL. BARS

August 11, 1989

OF COUNSEL
GEORGE R. HIRSCH®

Neil A. Kleinberg, Esq. Kleinberg, Moroney & Masterson, Esqs. 225 Millburn Avenue Millburn, NJ 07041

Re: Vanguard Vinyl Siding
Bankruptcy Case No. 83-00285 (Camden)

INCUSTI SITE EVALL SITE FLEME

Dear Neil:

Enclosed is letter dated August 2, 1989, I received from the Department of Environmental Protection without enclosures.

By way of background, our firm represented Vanguard in connection with a Chapter 11 case filed on January 19, 1983. Your firm represented the Creditors Committee. Thereafter in October, 1983, the Bankruptcy Court converted the case and Mr. Samuel D. Natal (now Judge Natal) was appointed the Chapter 7 trustee. After conversion, I believe your firm was selected as counsel to the trustee.

During the Chapter 7 proceeding and after the business operation ceased, the ECRA statute became effective. My records indicate that the trustee's final report was approved in October, 1984. My file does not indicate how the trustee disposed of the real property owned by the bankrupt which is the subject of the DEP's letter.

I would appreciate your contacting me, since I am not in a position to respond to the DEP's inquiries which may have to be dealt with by the trustee.

RASOHN, COOK, BAUMGARTEN, FISCH & BAIME

Page 2 August 11, 1989

Please contact me to further discuss this matter.

Very truly yours,

Mark Baumgarten

MB:AO Enclosure

cc: Honorable Samuel D. Natal
Ms. Barbara J. Strello
Mr. Anthony Cinque
Mr. Robert Walther

Mr. Robert Walther Paul M. Petigrow, Esq.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT

Michele M. Putnam
Deputy Director
Vazardous Waste Operations

John J. Trela, Ph.D., Director

Lance R. Miller
Deputy Director
Responsible Party Remedial Action

CERTIFIED MAIL RETURN RECEIPT REQUESTED

403 3 1999

Mark Baumgarten, Esq. Ravin, Sarasohn, Cook, Baumgarten, Fisch & Baime 103 Eisenhower Parkway Roseland, N.J. 07068

Dear Mr. Baumgarten:

RE: Environmental Cleanup Responsibility Act (ECRA) as it pertains to Vanguard Vinyl Siding.

On September 2, 1983, Governor Thomas Kean signed into law the Environmental Cleanup Responsibility Act (ECRA), N.J.S.A. 13:1K-6 et seq., which became effective December 31, 1983. ECRA applies to Industrial Establishments with operations that fall within the Standard Industrial Classification major group numbers 22-39, 46-49, 51 or 76 and are involved in the generation, manufacture, refining, transportation, treatment, storage, handling or disposal of hazardous substances or wastes. These establishments must notify this Department to provide assurance that the Industrial Establishment is environmentally acceptable upon sale, transfer or closing of operations. Failure to comply with ECRA can result in penalties of up to \$25,000 per day and in extreme cases in voiding of the transaction by the Department.

This office, established by the Department to implement the Act, has been advised that Vanguard Vinyl Siding has ceased operations at Charles and Water Streets, Gloucester City, Camden County ("Gloucester facility").

Accordingly, please submit to this office the General Information Submission ("GIS") portion of the ECRA Initial Notice within fifteen (15) upon receipt of this letters, and the Site Evaluation Submission ("SES") portion of the ECRA Initial Notice within thirty (30) days upon receipt of this letter.

For your convenience, I have enclosed a copy of a regulations and the ECRA Initial Notice forms.

If you have any questions, please contact Anthony Cinque of my staff at (609) 633-7141.

Very truly yours,

Barbara J. Strollo, Chief Bureau of ECRA Applicability

ATTACHMENT H

FILE: 04-14-12

Form HUM-001B

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS WASTE MANAGEMENT ENFORCEMENT ELEMENT

SPILL/WATER ENFORCEMENT REFERRAL

| TO: DOUG STUART | DATE: <u>3-24-</u> | |
|--|---------------------------------------|----------------------------|
| FROM: THOMAS DOWNEY | BUREAU: SOUTH | 4-RN |
| RE: NANGUARD VINYL SIDING 86 | 1-07-08-025 | |
| GLUUCESTER CITY, GLOUCESTER Co. 110 | Incident Number | 0414 |
| 8251 MARYLAND AVE. CLAYTON, MISSO | Block and Lot OURI 63105 | Cty/Mun Code |
| Mailing Address (Street, City, State, Zip) ITT COMMERCIAL FINANCE CORP. | NOT AVAILABL | |
| Responsible Party/Registered Agent | Insurer and | |
| The attached inspection/investigation which was cond | ucted on 9-4-86 | |
| | | eing referred |
| and it is recommended a DIRECTIVE ORDER PENALTY be i | Baned for Aloracion | 5 01. |
| NJSA 58:10 DESCRIPTION OF VIOLATION | | COMPLIANCE (YES/NO) |
| | TANGE | No |
| 23.11 DISCHARGE OF A HAZARDOUS SUBSI | | No |
| 23.11E FAILURE TO IMMEDIATELY NOTIFY | THE NUDER | |
| | | |
| | | |
| NJAC 7:14A | | |
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| | | |
| | • | |
| ADDITIONAL COMMENTS/PAST ENFORCEMENT HISTORY (2 YEAR | RS) | · |
| No Past History of Violations. ABONE RP IS MORTGAGE HULDER. THE SITE | · · · · · · · · · · · · · · · · · · · | |
| WAS A FORMER ECRA CASE # 85569 - WE CONGER | N 4 4 | |
| ACTIVE DUE TO WITHDRAWAL OF SALE, his other should address disposal of waste | <u>}</u> | |
| | and the same | |

REVIEWED AND APPROVED BY:

William Mi Junter 5-14-91 floor La Down 5/26/2

White - Compliance & Technical Services Copy
Yellow - File Copy

Pink - Inspector Copy

ATTACHMENT I

1

New Jersey Department of Environmental Protection AUG 0 5 1991 COMMUNICATIONS CENTER NOTIFICATION REPORT Received: 8/01/91 TD Log # Operator:PAT Case # 91-8-1-1309-13 Notification Type: Municipal nicipal Affiliation Reported By GLOUCESTER CITY FD 609-784-6667 DISP 12 Street Address Municipality State Incident Location: Facility Site GAF FACILITY Phone
Street Address Municipality County State
WATER ST GLOUCESTER CITY CAMDEN NJ
Location Type Industrial Incident Date 8/01/91 Time 1242 Substance Released POLYVINYL CHLORIDE Amount Released ()UNKNOWN ID: Known State Solid CAS# 9002-86-2 Release Is Continuous Additional Substances Substance Contained? U Hazardous Material? N TCPA? N A310 Letter? N COMU CODE: 0414 REF CODE: 002 Incident Description Abandoned Containers Injuries? N Public Evac? N Facility Evac? N Public Exposure? N Police On Scene? N Firemen On Scene? Y DEP Requested? Y Wind Sp/Dir Contamination Of Land Receiving Water NONE Status At Scene 12-15 40 GAL DRUMS ABANDONED AND SPILLING POWDER CHEMICAL. NO CLEANUP IN PROGRESS. Responsible Party Known Party GAF FACILITY Phone Contact Title OWNER Street Address
WATER ST Municipality County
GLOUCESTER CITY CAMDEN OFFICIALS NOTIFIED TITLE PHONE DATE TIME NJSP : MUNIC: OTHER: Name Affiliation Method Date Time T/M

1. BOB WINTERBURN DEQ ER2 Office, Faxed 8/01 1327 B Name vandaliged by locale. We solids. ECRA site Bell Derfee is familiar put case. Souber states no Emerg. Bapane recessary. ATTACHMENT J

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| MJ | General Prope | 7// | Area Relea | 350 | Level of Release | • | Fac | ease Prima | /_ | | | in Rele | |
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| ML | Haz Mat Identi | fication Sources | Used ——— | Number of Fire Serv | of Injuries rice | Oth | er | | | er of Fat ervice _ | alities | Other | <u> </u> |
| MM | Chemical or Tra | ade Name VIV | <u>4 L</u> | | <u> </u> | <u>.</u> IOE | - D | OT LD. No. | DOT | | CAS | . No. | |
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ATTACHMENT K



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS WASTE MANAGEMENT

20 East Clementon Road Gibbsboro, NJ 08026 (609) 346-8000 Fax No. (609) 346-8010

August 8, 1991

ITT Commercial Finance Corporation 8251 Maryland Avenue Clayton, MO 63105

RE: Vanguard Vinyl Siding Site, Block 110, Lot 3.B, Charles and Water Streets, Gloucester City, Camden County, Case #86-07-08-02S.

Dear Sir or Madam:

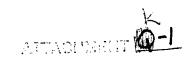
The New Jersey Department of Environmental Protection has conducted inspections of the above referenced site. The findings of the inspections indicate that several drums of hazardous substance (lubricating oils and heat transfer oils) and laboratory chemicals have been abandoned at the reference site. Furthermore, the inspections revealed that some of the drums might be in a state of deterioration such that a spill or discharge of the hazardous substances is likely. Moreover, there are indications that some spillage had already occurred north of building #3 at area "A" (see enclosed site map and inventory of materials). Our records do not indicate that any cleanup or disposal of hazardous substances has yet taken place.

Therefore, the Department hereby directs ITT Commercial Finance Corporation to immediately initiate the removal of all hazardous substances and all contaminated soils at the Vanguard site. Failure to conduct a timely and effective cleanup will result in administrative action with mandatory penalties.

Enclosed is a Notice of Violation issued pursuant to the Spill Compensation and Control Act (n.J.S.A. 58:10-23.11 et seq.) and regulations promulgated thereunder. Please respond to the Notice of Violation as indicated thereon.

Pursuant to N.J.S.A. 58:10-23.11 et seq., the Department is authorized to assess a civil administration penalty of not more than \$50,000 for each violation. Each day during which the violation continues shall constitute an additional, separate and distinct offense. Any person who willfully or negligently violates this Act shall, upon conviction, be guilty of a crime of the fourth degree and shall be punished by fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than one year, or both. The Department will initiate cost recovery for all administrative costs incurred by the Department in this matter.

Pursuant to N.J.S.A. 58:10-23.11(g)c, the Department shall hold ITT Commercial Finance Corporation jointly and severally responsible, without regard to fault, for all cleanup and removal costs.



ITT Commercial Finance Corporation August 9, 1991 Page Tvo

Failure to conduct a cleanup as directed herein will be interpreted by the Department as recalcitrant and uncooperative behavior and such behavior will be considered in future administrative action.

Please give this office at least three working days notice prior to and site work.

Sincerely,

Armand J. Minardi

Env. Compliance Investigator

AJM:krb
Enclosures
c William Dunfee, DRPSR
Robert Lentine, CCDH
case file

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

ATTACHMENT L

New Jersey Department of Environmental Protection Division of Hazardous Waste Management 20 E. Clementon Road Gibbsboro, N.J. 08026 (609) 346-8000



NOTICE OF VIOLATION

| ID NO. 86-07-08-028 | DATE angust 8, 1991 |
|--|---|
| NAME OF FACILITY Vanguard Vines | |
| LOCATION OF FACILITY Clourenter (| ity, Camelan County |
| NAME OF OPERATOR IT / Commerce | |
| 7:26-1 et seq.) promulgated thereunder and/or the 58:10-23 11 et seq.) and Regulations (N.J.A.C. 7: | N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. |
| DESCRIPTION OF VIOLATION | a pollutant not in compliance. Pollutant Discharge Elimin From |
| | |
| shall submit in writing, to the investigator issuing measures you have taken to attain compliance. that a violation has occurred and does not preclude. | ifteen (15) days of receipt of this Notice of Violation, you this notice at the above address, the corrective The issuance of this document serves as notice to you ude the State of New Jersey, or any of its agencies from from assessing penalties, with respect to this or other |
| | Investigator, Division of Hazardous Waste Management |

Department of Environmental Protection

New Jersey Department of Environmental Protection Division of Hazardous Waste Management 20 E. Clementon Road Gibbsboro, N.J. 08026 (609) 346-8000



NOTICE OF VIOLATION

| | • |
|--|---|
| DNO. 86-07-08-025 | DATE Aug 8, 1991 |
| NAME OF FACILITY Vanguard Vinigle | Siding |
| LOCATION OF FACILITY Cloucester City, C | anden County, New Jersey |
| <i></i> | Finance Corp. |
| | , |
| You are hereby NOTIFIED that during my inspection of your faction of your faction (s) of the Solid Waste Management Act, (N.J.S.A. 13:1 | E-1 et seq.) and Regulations (N.J.A.C. |
| 7:26-1 et seq.) promulgated thereunder and/or the Spill Compe | ensation and Control Act, (N.J.S.A. |
| 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) | promulgated thereunder were observed. |
| These violation(s) have been recorded as part of the permanen | nt enforcement history of your facility. |
| DESCRIPTION OF VIOLATION_ 58:10-23.11 c Discharge of a A (petroleum hypotrol 58:10-23.11 e Failure to us N.TOEP of the discharge | |
| V . | |
| Remedial action to correct these violations must be initiated in | tys of receipt of this Notice of Violation, you the above address, the corrective |
| that a violation has occurred and does not preclude the State | of New Jersey, or any of its agencies from |
| initiating further administrative or legal action, or from assessi | ng penalties, with respect to this or other |
| violations. Violations of these regulations are punishable by p | enalties of \$50,000 per violation. |
| The control of the co | _ |

ATTACHMENT R-2

Investigator, Division of Hazardous Waste Management Department of Environmental Protection ATTACHMENT M

III

TT Diversified Financial Corporation

04-14-12

August 27, 1991

Armand J. Minardi
Environmental Compliance Investigator
State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
20 East Clementon Road
Gibbsboro, New Jersey 08026

RECEIVED

AUG 2 8 1271

SOUTHERN BUREAU OF FIELD OPERATIONS

Re: Vanguard Vinyl Siding Site, Block 110, Lot 3.B

Charles and Water Streets, Gloucester City, Camden County

Case #86-07-08-02S ("Vanguard")

Dear Mr. Minardi:

ITT Commercial Finance Corporation ("Commercial") received your August 8, 1991 letter on August 19, 1991 demanding that Commercial immediately initiate the removal of all hazardous substances and all contaminated soils at the Vanguard site ("the Site"). Commercial expressly denies that it has any responsibility whatsoever for removal and expressly denies any liability.

As you are aware from your conversations with Ed Kleinberg of our office, in 1982 Commercial was granted a mortgage on the Site. With respect to the Site please note: Commercial does not and never has "owned" or "operated" the Site as defined by the Spill Compensation and Control Act. Furthermore, it does not and never has operated the Site by lease, contract or other form of agreement. It did not own or operate the Site immediately prior to any abandonment. It is not and was not the owner of the Site at the time of any discharge. Finally, Commercial does not have any control over the Site, the hazardous substances described in your letter, or the discharge of such substances.

By way of background in the matter, as your agency is already aware, the Owner of the Site (and mortgagor on the mortgage granted Commercial) was Vanguard Vinyl Siding, Inc. ("Owner"). On January 13, 1983, Owner filed a Chapter 11 Bankruptcy Petition. Subsequently, the Owner ceased operations on the Site and the proceeding was converted to a Chapter 7 case (liquidation). In August 1983 ITT received relief from the Bankruptcy Stay and, in September 1983, commenced an action to foreclose on the Site. In connection with that foreclosure, your agency was contacted. Environmental due diligence was conducted on the Site and your agency was advised of the results. In 1986 a decision was made to terminate the foreclosure. Your agency was advised of the decision (see June 6, 1986 letter from your Richard J. Katz attached as Exhibit A.



Armand J. Minardi August 27, 1991 Page 2

The New Jersey statute which you cite, N.JC.58:10-23-11g, <u>Liabilities for Clean Up</u> and Removal Costs and direct and indirect damages, assesses strict liability for all clean up and removal costs against any person who has discharged a hazardous substance or is in any way responsible for any hazardous substance which the department has removed or is removing.

As demonstrated above, Commercial, as Mortgagee, is not a person who has discharged a hazardous substance or is responsible for any hazardous substance under the terms of this statute. Commercial has taken no action which would trigger the operation of the statute. Moreover, your Mr. Katz's June 6, 1986 letter appears to concur in this position.

For the above reasons, the enclosed notice of violation and request to conduct a clean up is inappropriate.

Very truly yours,

Kathleen S. Stolar

Vice President

Associate General Counsel

Kathleen 5. Stolar

KSS/ph/L50

Enclosure



State of New Tersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT

HAZARDOUS SITE MITIGATION ADMINISTRATION CN 028, Trenton, N.J. 08625

MARWAN M. SADAT, P.E. DIRECTOR JORGE H. BERKOWITZ, PH.D. ADMINISTRATOR

0 6 JUN 1986

Mr. Edward Kleinberg, Sr. ITT Diversified Credit Corp. 8251 Maryland Ave. Clayton, MO 63105

RE: Vanguard Vinyl Siding, Inc. Gloucester City, Camden County ECRA Case #85569

Dear Mr. Kleinberg:

Please be advised that, based upon your April 21, 1986 letter, the referenced case has been closed.

This determination is made in light of the cancellation of the proposed foreclosure by ITT, thereby ending the transaction which triggered the ECRA review.

Any inaccuracies in your statement could alter this decision. Additionally, the current inapplicability of the Environmental Cleanup Responsibility Act (ECRA) does not absolve ITT of any responsibilities it may have under any other environmental statutes and regulations, nor does the Department waive its right to take any actions appropriate under same.

In this regard, be advised that based on previous submissions by ITT, which indicate soil contamination and existing chemical storage, this facility has been referred to the Bureau of Enforcement for immediate action.

Finally, you are advised that a foreclosure by ITT, a sale of operations, or a sale of the real property will subject this facility to our review. Consummation of any ECRA-affected action without compliance with that Act is subject to fines of up to \$25,000 per day.

Any questions you may have in regard to this letter should be directed to me.

Sincerely,

Richard J. Katz, Assistant Chief

Bureau of Industrial Site Evaluation

HS155:dr

cc: T. Kearns, BISE

W. Burshtin, DWM-Enf.

New Jersey Is An Equal Opportunity Employer

ATTACHMENT N

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VANGUARD VINYL SIDING, INC.
aka: GAF VANGUARD VINYL SIDING, INC.
CHARLES AND WATER STREETS
GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY
EPA ID NO. NJD 982530073

GENERAL INFORMATION AND SITE HISTORY

Vanguard Vinyl Siding, Inc. (Vanguard) encompasses approximately 2.06 acres at Block 110, Lot 3B in Gloucester City, Camden County, New Jersey. The site is bordered to the south and east by GAF Corporation, to the west by the Delaware River and to the north by Koch Fuels, Inc. The estimated population residing within 4.0 miles of the site is 311,300. The nearest residence is located approximately 0.3 mile from the site.

Sanborn Fire Insurance Maps show a hotel and summer cottages at the site from the late 1890s through the early 1900s. Prior to World War I the Pusey and Jones Shipyard (also known as the Pennsylvania Shipbuilding Company) was constructed at the site. It is believed that Lang Mills had an existing paper mill operation adjacent to the shipyard. Prior to 1930, Lang Mills purchased the site and converted it to paper production. In approximately 1935 Lang Mills was acquired by the Ruberoid Company and continued to manufacture paper products. In 1967 Ruberoid merged with GAF Corporation, producers of roofing and flooring grades of felt, vinyl siding and asbestos pipe coverings. Vanguard purchased the site from GAF on August 17, 1981. Prior to the sale of the property, this facility was known as GAF Vanguard Vinyl Siding. Vanguard filed for bankruptcy on January 13, 1983 and subsequently ceased operating at the site. In addition, the principal and chief operating officer of Vanguard, Robert C. Walther also filed for protection under the United States Bankruptcy Code. ITT Diversified Credit Corporation (ITT) was the holder of the mortgage for this facility and wished to foreclose on this mortgage. ITT was advised in 1985 by the NJDEP that a foreclosure sale would trigger the Environmental Cleanup Responsibility Act (ECRA). ITT could not determine any responsible parties who were legally obligated to comply with ECRA.

In an effort to obtain a formal clearance from the NJDEP/ECRA Compliance requirement, ITT filed General Information and Site Evaluation Submissions with the NJDEP/Division of Hazardous Waste Management/Bureau of Industrial Site Evaluation (DHWM/BISE). ITT was concerned that a continuing ECRA Compliance requirement would have a negative impact on bidding at a sheriff's foreclosure sale. ITT stated that by filing the submissions they were not assuming any responsibility for complying with ECRA and should not be construed as a owner or operator for purposes of ECRA. On April 21, 1986 ITT cancelled the proposed foreclosure of the Vanguard facility and withdrew from the ECRA process.

SITE OPERATIONS OF CONCERN

It is believed that asbestos production occurred at the facility from the 1950s until the late 1960s, during the years that the Ruberoid Corporation and GAF Corporation operated at the site. Approximately 12 to 15 percent of the asbestos produced was discarded as solid waste. It was noted in a Preliminary Assessment prepared by the NJDEP/Division of Hazardous Waste Management/Bureau of Planning an Assessment (DHWM/BPA) of the GAF site that former employees stated an area behind the facility and between the Delaware River was used as a dump site for asbestos waste from the plant. Dumping in this area apparently began with the Ruberoid Corporation and continued until approximately 1971.

Aerial photographs of the site from 1946 show what appears to be a pile of material immediately behind the manufacturing building adjacent to the bulkhead on site, in the intertidal zone of the Delaware River. It is not known what this material was. Subsequent photographs show this area to build up and then decline. GAF produced vinyl siding at the site from the late 1960s through 1981. As noted previously this facility had been known as GAF Vanguard Vinyl Siding.

Actual operating procedures could not be determined, although information supplied on the Site Evaluation Submission (filed by ITT Diversified Credit Corporation, the mortgage holding company) stated that Vanguard produced vinyl siding for homes and other buildings. Limited information speculated that polyvinyl chloride resins, stabilizers and pigment were used in the production process. Resin was stored in silos and mixed with stabilizers and pigments at the blend area. After blending, the mixture was extruded in one of six extrusion lines. A machine shop, dye shop, electrical shop, millwright shop, welding shop and quality control laboratory were maintained on the premises.

Areas of concern at the site were determined by BCM of Plymouth Meeting, Pennsylvania. Although no documented spills were noted at the site, visual inspection by BCM in 1985 of several areas discovered evidence of possible spills. Area A, a truck loading area on the north side of Building 3, was used as a shipping/receiving area for raw materials and finished products. Three silos storing vinyl pellets were located between the loading area and the manufacturing building. Initial sampling at Area A detected elevated levels of phthalates and petroleum hydrocarbons (PHCs). Area B is located outside of a door on the northeast side of the main building. Visual inspection and initial sampling by BCM confirmed spillage in this area from a drum storage rack located just inside the building. Area C is located inside the manufacturing building and consists of an area of exposed ground surrounded by concrete flooring. Visual observation and initial sampling by BCM indicated spillage of polyvinyl chloride (PVC) resins and pigments.

An inspection was conducted at the site on July 15, 1986 by the Camden County Department of Health. Noted inside the building was a considerable amount of plastic resin material stored in open boxes, labeled acetominophen powder. Several containers and bags of dye products were also observed, many of which had spilled on the floor. Approximately 20 unlabeled 55-gallon drums and several 55-gallon drums of thermolite were observed in the building. In addition, ten 55-gallon drums of light weight oils, solvents, heat transferring fluids and automobile transmission fluid were observed. Located in the laboratory were bottles (approximately 1,000 ml) of trichloroethane, methylene chloride and cyclohexanone. Several unlabeled containers were discovered as well as dye material which had been spilled on the floor. A 55-gallon drum of asbestos insulation and an approximately 20-gallon container marked corrosive was noted lying on the floor near a floor drain. Evidence of leakage was noted near this container. Outside the manufacturing building to the north were three unlabeled 55-gallon drums some of which exhibited leakage at the bung holes. One unlabeled 55gallon drum was noted lacking a bung cap. In addition, six to eight empty drums were discovered in this area, some were empty while others appeared to have expanded or ruptured at the seams.

On September 4, 1986 the NJDEP/Division of Hazardous Waste Management/ Southern Bureau of Field Operations conducted an initial investigation of the Vanguard site with a representative of the Camden County Department of Health. Entry to the site was supplied by an unidentified employee of the adjacent GAF facility. Discovered in the building were apparently the same conditions as listed in the July 15, 1986 inspection. Noted in manufacturing Building No. 3 were several areas of spilled material which were unidentifiable. Outside the building at the north yard area were three silos containing what appeared to be different color dye materials; spillage on the asphalt around the exterior of the silos was noted. As mentioned previously located along the north fence were numerous unlabeled drums, some contained material, others were empty and exhibited bulging tops and bottoms. Evidence of spillage was noted on the soil in this area.

A STATE OF THE SECOND

An investigation was conducted at Vanguard on November 3, 1988 by the NJDEP/SBFO and the Camden County Department of Health. Access to the site was obtained by a security guard at the adjacent GAF facility. Noted in the laboratory area were containers of methylene chloride and trichloroethene (TCE). Building No. 10 contained ten drums of various types of petroleum products stored in the drum storage rack and numerous boxes containing titanium pigments, phthalate and polyvinyl chloride resins. In addition, other substances such as Thermolite 137 were noted in this building. Solid waste was noted both inside as well as outside the buildings. North of Building No. 3 were 15 drums, one drum was half-filled with a light oil, two drums were filled with an unknown substance, the remaining drums appeared to be empty.

The NJDEPE received an incident notification report on August 1, 1991 regarding a possible discharge of hazardous substances at Vanguard (the name of the facility listed on the report was GAF). Investigation of the incident by the Camden County Department of Health and the Gloucester City Fire Department discovered approximately twelve to fifteen 40-gallon drums of polyvinyl chloride (in powder/pellet form) at the site. The drums were noted as being abandoned and spilling and appeared to have been vandalized. This incident was referred to the NJDEPE/Division of Responsible Party Site Remediation/Southern Bureau of Field Operations (DRPSR/SBFO).

A Pre-Sampling Assessment (PSA) was conducted at Vanguard on February 20, 1992 by the NJDEPE/Division of Responsible Party Site Remediation/Bureau of Site Assessment (DRPSR/BSA) in conjunction with the Emergency Management Coordinator for Gloucester City. Located inside manufacturing Building No. 10 was a 55-gallon drum of ethylene glycol (antifreeze). Three additional drums contained suspected asbestos material. Three unlabeled partially full 55-gallon drums were located in a small room at the west end of this building, a fourth drum was labeled as ethylene glycol.

Manufacturing Building No. 3 contained the laboratory, no full bottles of product were discovered during this inspection. The floor was littered with broken glass and covered with dye material spilled from containers.

During the PSA ten 55-gallon drums were observed at the drum storage rack; most of the drums were lacking bung caps. Some of the drums were empty some were partially full. Two additional 55-gallon drums were noted next to the drum storage rack. The drums in this area were labeled as DTE light oil, gear oil, safety solvent and lubricating oil.

The last room inspected contained boxes of powder material labeled as acetominophen powder. In addition, containers and drums of 2-diethylhexyl phthalate, acrylic resin, sicostab R335, Thermolite 137, titanium pigment and Stanclere 233 were observed by BSA personnel.

Noted throughout the building was suspected asbestos piping and pipe coverings. In many areas this material appeared to be in a degraded state and in some locations had deteriorated and fallen onto the floor.

Outside the buildings along the north fence line were three 55-gallon drums (one crushed) lying in the vegetation. Directly west of this area were approximately nine 55-gallon drums many of which had expanded at both ends and ruptured at the seams. Most of these drums appeared to be empty. Four unlabeled 55-gallon drums were noted standing upright in this area, three appeared to be leaking.

GROUNDWATER ROUTE

Vanguard is located near the western boundary of the Atlantic Coastal Plain Physiographic Region. Underlying this area are unconsolidated sediments of Quaternary, Tertiary and Cretaceous age consisting of alternating layers of sands, silts and clays. These sediments are approximately 250 feet thick at the site and thicken eastward towards the Atlantic Ocean.

The most productive source of groundwater in Camden County is the Potomac-Raritan/Magothy Aquifer system. This system consists of aquifers composed of sand and some gravel and confining units composed of silts and clays, and is overlain in the outcrop area by highly permeable Pleistocene sand and gravel. The sands are divided into three hydrologic units, an upper, middle and lower aquifer. The Magothy Formation comprises the upper unit; the middle and lower units are composed of sands of the Raritan Formation and the Potomac Group.

The Magothy and Raritan Formations consist of alternating beds of sand, gravel and clay. The Raritan Formation is predominantly light colored, where as the magothy beds include some darker lightic and glauconitic material. The maximum thickness of the Magothy and Raritan Formations in the Camden area is approximately 240 feet.

No production wells or monitoring wells are located on site.

Gloucester City Water Department operates four wells approximately 0.85 mile from the site. Depths of the wells range from 260 feet to 306 feet; all wells tap the Raritan/Magothy Aquifer. Approximately 12,500 residents are serviced in Gloucester City by this system.

Brooklawn Water Department operates three wells approximately 0.86 mile from the site. Depths of the wells range from 293 feet to 327 feet; all tap the Raritan/Magothy Aquifer. Approximately 2,520 residents in Brooklawn are serviced by this system.

National Park Water Department operates two wells approximately 3.3 miles from the site. One well is 282 feet deep, the other 275 feet, both wells tap the Raritan/Magothy Aquifer. Approximately 3,550 residents in the Borough of National Park are serviced by this system.

New Jersey American Water Department operates five wells within a 3-to 4-mile radius of the site. Two additional wells are located approximately 2.9 miles from the site. All wells tap the Raritan/Magothy Aquifer and range in depth from 190 feet to 598 feet. Approximately 23,440 residents are serviced by this system in sections of Haddon Heights and Runnemede.

Collingswood Water Department operates six wells 3 to 4 miles from the site. A seventh well is located approximately 2.4 miles from the site. The seven wells range in depth from 281 feet to 318 feet, all tap the Raritan/Magothy Aquifer. Collingswood Water Department services approximately 20,000 residents in Collingswood, a section of Woodlyn and a section of Haddon Township.

Bellmawr Water Department operates two wells approximately 1.55 miles from the site. Average depth of the wells is 373 feet. Two additional wells are located approximately 2.55 miles from the site, average depth of the wells is 560 feet. All wells tap the Raritan/Magothy Aquifer. Approximately 9,520 residents are serviced by this water system, approximately half of Bellmawr Borough.

Camden City Water Department operates three wells which service the Parkside Treatment Plant. The wells are approximately 3.3 miles from the site and range in depth from 230 feet to 290 feet. All three wells tap the Raritan/Magothy Aquifer, approximately 20,000 residents are serviced in the Camden City area.

West Deptford Water Department operates one well 2.6 miles from the site. A second well is 3.3 miles from the site. The wells are approximately 365 feet deep and tap the Raritan/Magothy Aquifer. The two wells are part of an interconnected water system which is comprised of a total of seven wells. Approximately 19,000 residents are serviced by this system and approximately 64 residents are served by private wells in West Deptford Township. In addition, approximately four industries in the area are serviced by private wells.

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Westville Water Department operates three wells approximately 1.3 miles from the site. Depths of the wells range from 274 feet to 317 feet, all wells tap the Raritan/Magothy Aquifer. Approximately 7,000 residents are serviced in Westville and portions of Deptford and West Deptford.

Deptford Township Municipal Utilities Authority operates one well approximately 2.6 miles from the site. It is 363 feet deep and taps the Raritan/Magothy Aquifer. Approximately 1,100 residents are serviced in a section of Deptford Township.

Woodbury Township Water Department operates two wells in a 3- to 4-mile radius from the site. One well is 188 feet deep, the other is 305 feet deep; both tap the Raritan/Magothy Aquifer. The wells are part of an interconnected system (with a total of five wells) which service approximately 11,920 residents in Woodbury, West Deptford, Deptford, Wenonah and Woodbury Heights.

Haddon Township Water Department operates four wells in a 3- to 4-mile radius from the site. The wells range in depth from 448 feet to 487 feet, all tap the Raritan/Magothy Aquifer. Approximately 12,000 residents are serviced by this system in Haddon Township.

The potential for groundwater contamination may exist at the site if contaminants detected in the soil have leached into the groundwater.

SURFACE WATER ROUTE

Vanguard is located adjacent to the Delaware River to the west. Runoff from the site could flow into the Delaware River, which flows south from the site. The Delaware River from river mile 108.4 to below the mouth of Big Timber Creek is classified as Zone 3. Designated uses in Zone 3 include agricultural, industrial and public water supply after reasonable treatment; wildlife, maintenance of resident fish and other aquatic biota; migration of anadromous fish; secondary contact recreation; and navigation.

Vanguard did not hold a New Jersey Pollutant Discharge Elimination System (NJPDES) permit for their facility. It was noted on the General Information Submission that Vanguard discharged sanitary and/or industrial wastes to the Gloucester City Sewage Authority.

The Delaware River is tidal at the site, located between river mile 106 and river mile 97 in New Jersey are numerous industrial intakes. The City of Philadelphia operates one drinking water intake on the Delaware River at Torresdale, Pennsylvania. This intake is approximately 14.7 miles upstream from the site.

Two coastal wetlands (tidal flats) are located downstream from the site. One area is approximately 80 acres in size and is less than 0.75 mile from the site. The second area is approximately 320 acres in size and is approximately 1.5 miles downstream from the site.

Aerial photographs from the 1940s show what appears to be a pile of material located adjacent to the bulkhead on site. This material appears to increase and then diminish in size throughout the years. It is not known if this material was asbestos waste which had been allegedly dumped behind the facility during the years it was operated by the Ruberoid Company and GAF Corporation.

Habitat known to be utilized by a New Jersey State endangered or threatened specie is located approximately 7.5 miles upstream from the site. Twelve threatened or endangered species in New Jersey utilize habitats such as those found in USGS Philadelphia, Woodbury, Runnemede and Camden, New Jersey, Pennsylvania Quadrangles. They include the shortnose sturgeon (Acipenser brevirostrum), American shad (Alosa sapidissima), pine barrens treefrog (Hyla andersonii), brook trout (Salvelinus fontinalis), northern pine snake (Pituophis melanoleucus), bog turtle (Clemmys muhlenbergii), wood turtle (Clemmys insculpta),

peregrine falcon (<u>Falco peregrinus</u>), red-shouldered hawk (<u>Buteo lineatus</u>), black rail (<u>Laterallus jamaicensis</u>), upland sandpiper (<u>Batramia longicauda</u>), and Henslows sparrow (<u>Ammodramus henslowii</u>).

AIR ROUTE

No air sampling has been conducted at the site. The potential for air contamination does not appear to exist at this site.

SOIL

Soil at the site is classified as Downer-Woodstown-Dragston series which includes gently sloping, grayish-brown sandy soils. The Downer series consists of dark grayish-brown, well-drained soils that have a yellowish-brown subsoil containing only slightly more clay than the surface layer. These soils are nearly level to gently sloping. Soils of the Downer-Woodstown-Dragston series are rapidly permeable to moderately permeable.

BCM of Plymouth Meeting, Pennsylvania conducted limited soil sampling at the site in November 1985. Three areas of concern were noted at the site. Area A was a truck loading/unloading area and the location of miscellaneous drum storage. Visual observations indicated possible spills at this location in the past. Petroleum hydrocarbons (PHCs) were detected at this area at 9,080 ppm below the NJDEPE proposed cleanup standard of 10,000 ppm; 1,2-dichloroethane was detected at 1.08 ppm, below the NJDEPE proposed cleanup standard of 24 ppm; di-(ethylhexyl) phthalate and di-N-octyl phthalate were detected at 7.56 ppm and 11.5 ppm, respectively.

Area B is an area which received run off from the drum storage rack located in manufacturing Building No. 3. Initial sampling results detected PHCs at 15,800 ppm; above the NJDEPE proposed cleanup standard of 10,000 ppm; trans-1,2-dichloroethene at 2.70 ppm below the NJDEPE proposed cleanup standard of 10,000 ppm; and trans-1,3-dichloro-propylene at 2.01 ppm, below the NJDEPE proposed cleanup standard of 5 ppm.

Area C is an area of uncovered ground inside manufacturing Building No.3, spilled at this area were PVC resins and pigments. Lead was detected at this area at a concentration of 141 ppm below the NJDEPE proposed cleanup standard of 600 ppm.

Additional sampling was to occur at all three areas to delineate the extent of contamination. In April 1986 ITT Diversified Credit Corporation withdrew Vanguard from the ECRA process; all remedial activities ceased at the site at this time.

DIRECT CONTACT

It was noted during the Pre-Sampling Assessment (PSA) conducted by the NJDEPE/DRPSR/BSA on February 20, 1992 that a hole exists in the fence along the western perimeter of the Vanguard site. Access to the side by the off- site population is easily obtained at this area. Several doors of the manufacturing buildings were found to be unlocked during the PSA, and are a significant matter of concern. The Emergency Management Coordinator for Gloucester City stated that adolescents are known to frequent the facility and use the ramp inside the manufacturing building for skateboarding. Observed inside the building were areas where small fires appear to have been started. Evidence of vandalism was noted throughout the inside of the buildings, containers of dye material were thrown and broken on the floor at several locations, graffiti was noted on the walls and numerous windows in the building were broken. The laboratory in manufacturing Building No. 3 was littered with broken glass Strewn across the floor in this area were broken bottles, spilled dyed material and additional material. It had been previously noted in a November 3, 1988 site investigation by NJDEP/DHWM/ SBFO that containers of methylene chloride and TCE were located in the laboratory.

Suspected friable asbestos material is also located throughout the building.

FIRE AND EXPLOSION

Located throughout the manufacturing building on site were several areas where fires had been started. Evidence of vandalism is prevalent throughout the site. Unlabeled 55-gallon drums are located at several locations inside and outside the buildings, it is not known if the product contained in the drums is flammable and/or combustible.

The Material Safety Data Sheets submitted for Stanclere T-233P (a substance located inside the buildings) noted that the possibility of dust explosions exists for this product.

ADDITIONAL CONSIDERATIONS

No damage to flora or fauna appeared at the site during the February 20, 1992 NJDEPE Pre-Sampling Assessment. No contamination to off-site property has been documented. Contamination of the Delaware River may have occurred if asbestos waste material had been dumped behind the facility, adjacent to the bulkhead on site.

ENFORCEMENT ACTIONS

On November 5, 1986 Vanguard was issued a Notice of Violation by the NJDEP/ DHWM/BSFO for discharging a hazardous substance and failure to notify the NJDEP.

On May 23, 1991 an investigation of the Vanguard site was conducted by the NJDEP/DHWM/SBFO. It was noted that conditions at the site had remained virtually unchanged since 1988. It was recommended at this time that an Administrative Order (AO) be issued to the responsible party/property owner. It was determined by the NJDEPE that ITT Diversified Credit Corporation (the mortgage holding company) could not be held as a responsible party, therefore no AO was ever issued.

On August 8, 1991 the NJDEPE/Division of Responsible Party Site Remediation/ Southern Bureau of Field Operations (DRPSR/SBFO) issued a Notice of Violation to Vanguard for discharging a hazardous substance (petroleum hydrocarbons) and failure to immediately notify the NJDEPE of the discharge. An additional violation was issued on this date for discharge of a pollutant not in compliance with a valid New Jersey Pollutant Discharge Elimination System Permit.

PRIORITY DESIGNATION

A medium environmental concern is assigned to this site. Soil at the site is contaminated with petroleum hydrocarbons and volatile organic compounds at several areas. Of concern is the use of this site by the off-site population.

RECOMMENDATIONS

It is recommended that the fencing along the western perimeter of the site be replaced immediately. The site should be secured to prevent further vandalism from occurring and to eliminate the threat of direct contact by the off-site population. An asbestos assessment should be conducted at the site. Friable asbestos should be removed from the manufacturing buildings. On March 11, 1992 the NJDEPE/DRPSR/Bureau of Field Operations - Site Assessment Section submitted this site to the USEPA, Removal Action Branch for consideration of a CERCLA removal action.

Submitted by:

Eileen Stewart Hazardous Site Mitigation Specialist Trainee Bureau Field Operations March 18, 1992

ATTECHMENT NO

VANGUARD VINYL SIDING, INC.

AKA: GAF VANGUARD VINYL SIDING

CHARLES & WATER STREETS

GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY

EPA ID. NO. NJD982530073

ADDENDUM

On March 11, 1992 the USEPA, Removal Action Branch received a request from the NJDEPE/DRPSR/BFO-Site Assessment Section to evaluate the Vanguard site for CERCLA Removal Action consideration. The Technical Support Section of the USEPA collected samples at the site on April 1, 1992 for hazard categorization. Analysis of the samples collected supported but did not confirm the presence of PVC resin. Additional samples were collected on April 16, 1992 at the site by the USEPA Technical Support Section. Laboratory analysis detected the presence of elevated levels of tetrachloroethylene, toluene and xylene in some of the drums (data is considered preliminary since quality control validation has not been completed). In addition, PVC resin and asbestos related material (chrysotile) at 2 to 3 percent was confirmed in several samples.

It was concluded that a release of CERCLA designated hazardous substances has occurred at Vanguard. The threat of exposure through direct contact with hazardous substances abandoned at the site is present. Additionally, the potential for a serious release resulting from a fire exists at the site. It was recommended that a CERCLA Removal Action be conducted at Vanguard. Suggested areas to be addressed include the containerized and spilled material located inside and outside the building, asbestos material noted in boxed containers, boxed and spilled PVC resin and four electrical transformers potentially contaminated with polychlorinated biphenyls.

Submitted by:

Eileen Stewart September 16, 1992 ATTACHMENT O



State of New Jersey Department of Environmental Protection and Energy

Division of Responsible Party Site Remediation CN 028 Trenton, NJ 08625-0028 Tel. # 609-633-1408 Fax. # 609-633-1454

Scott A. Weiner Commissioner

Karl J. Delaney Director

MARI 11 1092

11/20

Kathleen C. Callahan Emergency and Remedial Response Division U.S. Environmental Protection Agency 26 Federal Plaza New York, New York 10278

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Re: Removal Request - Vanguard Vinyl Siding
Charles and Water Streets
Gloucester City, New Jersey

Dear Director Callahan:

The New Jersey Department of Environmental Protection and Energy (NJDEPE) hereby submits the Vanguard Vinyl Siding site for CERCLA removal action consideration. The following information details the case history and supports the removal request.

Vanguard Vinyl Siding (Vanguard) was a former manufacturer of vinyl siding which operated from 1981 to 1983 when the company and company CEO filed for bankruptcy. The abandoned 2.06 acre facility, listed as Block 110, Lot 3B, is located in an industrial section of Gloucester City along the Delaware River. Historical site activities in the 1950s and 1960s, while under ownership by the Ruberoid Corporation (merged with GAF in 1967) included the production of asbestos piping and asbestos shingles. During this period asbestos waste was suspected of being disposed of on site.

A Pre-sampling Assessment conducted by the NJDEPE, Division of Responsible Party Site Remediation (DRPSR), Bureau of Site Assessment (BSA) on February 20, 1992 indicated the presence of approximately thirty containers of varying sizes and states of condition. Labels and markings indicate that materials stored in these containers may include the following: ethylene glycol, oils, solvents, asbestos, 2-diethylhexyl phthalate, acrylic resin and titanium pigment. In addition, several unlabeled drums were also present on site and the chemical contents of shattered laboratory reagents were found strewn throughout the lab area.

Notices of Violation issued by the Department to Vanguard on November 5, 1986 and August 8, 1991 were met without response. ITT Diversified Credit Corporation, the current mortgage holding company, refuses to foreclose on the property as it would trigger an ECRA response. ITT views the mortgage

as uncollectible and has thus distanced itself from all cleanup responsibilities.

Although the site perimeter is fenced, access onto the property via a hole remains unimpeded. The buildings on site remain open and are visited on a regular basis by local children and adolescents as evidenced by graffiti, campfire remains and a portion of the building used as a skateboard ramp. It is likely that the laboratory damage was caused by these trespassers.

The Department requests that the EPA stabilize the site by repairing the fence; sealing all access points into the building; and sampling, characterizing, over packing and disposing of all chemical and asbestos related material in such a manner as to safeguard the health and welfare of the local population.

Should your staff require additional information, please have them contact David Triggs of the Bureau of Site Assessment at (609) 584-4289.

Very truly yours,

Karl J. Delaney Director

c: Richard Salkie, USEPA George Zachos, USEPA Assistant Director Howitz, Discharge Response Element Chief Van Fossen, Bureau of Site Assessment

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ATTACHMENT P

in 1982 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

COPY TO:

DATE: 3 0 1992

Ker Klos

Transmittal of Removal Site Evaluation for Vanguard Vinyl Siding, Inc., Gloucester City, New Jersey

0219,-21 to SITE

Richard C. Salkie, Associate Director for Removal and Emergency Preparedness Programs

FIEC NJD982530073

Delmar Karlen, Chief New Jersey Superfund Branch

Attached is a copy of the Removal Site Evaluation for Vanguard Vinyl Siding, Inc. The site is eligible for a CERCLA Removal Action. Please assign an attorney to the site as previously requested. Should you have any questions please call me at 908-321-6658 or George Zachos at 908-321-6621.

Attachment

G. Zachos, ERR-RAB cc (w/attachment):

D. Santella, ERR-PRTS

S. Becker, ERR-PIMS

EILEEN FYI Please freward to
Dave -T.
Thanks

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

Removal Site Evaluation for the Vanguard Vinyl Siding, Gloucester City, New Jersey

Nick Magriples, On-Scene Coordinator With Wager Technical Support Section

File

ro:

site I.D. No.: Removal Assessment Ranking: 7

INTRODUCTION

On March 11, 1992, the United States Environmental Protection Agency (EPA), Removal Action Branch, received a request from the State of New Jersey Department of Environmental Protection and Energy (NJDEPE) to evaluate Vanguard Vinyl Siding, Inc. for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Removal Action consideration.

There has been a release of CERCLA designated Hazardous Substances at Vanguard Vinyl Siding, Inc (VVS). The threat of exposure through direct human contact with the abandoned containers of contaminated oils, pigments, organotin stabilizers, and exposed asbestos is present. The fenced property and the building itself has been accessed as evidenced by fire charred floors, graffiti and a skateboarding ramp. Although a fence surrounds VVS, there are holes cut in several areas of the fence that allow for access to the site. The building itself has numerous access points ranging from open doors to broken windows and holes in the walls.

The threat of a serious release resulting from a fire exists, due to vandalism. Spot fires have been documented by the Gloucester City Fire Department. There are large amounts of paper debris scattered throughout the building and a portion of the building, including the roof, is constructed of wood. A fire would result in the degradation of potentially large amounts of the PVC resin, and the subsequent release of harmful substances. The release would affect a residential neighborhood which begins approximately 1,000 feet from the site and includes numerous schools and churches, as well as a senior citizens apartment complex, within a half-mile of the site.

Although PVC resin is neither a CERCLA designated Hazardous Substance nor a pollutant or contaminant, other situations or factors exist that constitute a significant threat. Additionally, there does not appear to be any other available mechanisms for response from either the owners, the NJDEPE or Gloucester City.

SITE CONDITIONS AND BACKGROUND

Site Description

VVS is located at the intersection of Charles and Water Streets in Gloucester City, Camden County, New Jersey. Lot 3B, in an approximately 2.06 acres, listed as Block 110, Lot 3B, water industrial section of the city. The site is bounded by Water street to the cast a vacant facility owned by CAF to the county. Street to the east, a vacant facility owned by GAF to the south, the Delaware River to the south and Koch Fuel Terminal to the north (see Figure 1). The nearest residential area to the site is less than 1,000 feet away.

A large apartment complex (Gloucester than 1,000 feet away. Towne), housing an estimated 100-200 senior citizens, is located approximately 2,000 feet northeast of the facility and several schools, churches and parks/playgrounds are less than 1/2 mile from the facility. the facility.

VVS operated at the site from 1981 through 1983. During its operations, VVS produced plastic siding for homes and other buildings. It is reported that the raw materials, including polyvinyl chloride (PVC) resin, stabilizers, plasticizers and polyvinyl chloride truck or rail car. The resin was stored pigments were delivered by truck or rail car. The resin was stored in silos and mixed with the etabilizers and nignants in silos and mixed with the stabilizers and pigments. After In Silos and mixed with the stabilizers and pigments. After blending, the mixture was extruded in one of a total of six extrusion lines. Other operations at the site in support of a constitution of the site of process operations included, a machine shop, die shop, electrical shop, millwright shop, a welding shop and a quality control

Historical site activities in the 1950s and 1960s, while under ownership by the Ruberoid Corporation (merged with GAF in 1967), laboratory. included the production of asbestos piping and asbestos shingle.

The VVS facility consists of two buildings, Manufacturing Building Nos. 3 and 10, that have been interconnected by smaller structures (see Figure 2). Area A was a truck loading area on the north side (see Figure 2). Area A was a truck roading area on the north Side of Building 3. Raw materials and finished products were received and shipped from this area. Three silos used for storing vinyl pellets are also located between the loading area and the manufacturing building. Area B is located just outside of the door on the northeast side of the main building. This area was reported to have received spillage from a drum storage rack located just outside the building. Both visual and initial sampling results, conducted by a consultant (1985) for the owner, reportedly confirm that spillage did occur in this area. Area C is located inside the plant and consists of an area of exposed ground surrounded by concrete flooring.

3. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

On March 6, 1985, samples were collected by a consultant to the owner as part of an initial evaluation of the VVS Site. Soil samples collected from Area A indicated the presence of petroleum hydrocarbons (9,080 ppm), 1,2-dichloroethane (1.08 ppm), tetrachloroethane (0.70 ppm) and di-n-octyl phthalate (11.5 ppm). tetrachloroethane (0.70 ppm) and di-n-octyl phthalate (list ppm). Samples collected from Area B indicated elevated levels of petroleum hydrocarbons (15,800 ppm), trans-1,2-dichloroethylene (2.70 ppm) and trans-1,3-dichloropropylene (2.01 ppm). Samples (2.70 ppm) and trans-1,3-dichloropropylene (2.01 ppm) and low levels collected from Area C indicated PVC resins, pigments and low levels of volatile organics and lead.

According to an inventory of drums developed by the same consultant, and partially confirmed by the Technical Support Section on subsequent site visits, there are approximately 50 - 70 containers of varying size within and outside of the buildings containing oils, pigments, organotin stabilizers, buildings containing oils, pigments, organotin stabilizers, buildings containing oils, pigments, organotin stabilizers, buildings containing oils, pigments, and 35 bags of an feet each) of powders that may be PVC resin; and 35 bags of an feet each) of powders that may be PVC resin; and 35 bags of an unknown powder contained within the buildings at the VVS Site. The floors of some of the rooms are covered in either pigment or PVC floors of some of the rooms are covered in either pigment or PVC floors of some of the rooms are covered throughout.

Samples were collected at the VVS Site by the Technical Support Section on April 1, 1992 for hazard categorization. These analyses supported, but did not confirm, the presence of PVC resin. Support Samples collected on April 16, 1992 by the Technical Support Section for confirmatory laboratory analyses detected the presence Section for confirmatory laboratory analyses detected the presence of elevated levels of tetrachloroethylene, toluene and xylene in some of the drums that were sampled (Note: this data is considered some of the drums that were sampled (Note: this data is considered preliminary since the quality control validation has not been completed). Additionally, the presence of PVC resin and asbestos completed material (chrysotile) at 2-3% was confirmed in several of the samples.

All of the materials listed above, except for petroleum hydrocarbons, PVC resin and organotin compounds, are CERCLA hydrocarbons, PVC resin and organotin compounds, are CERCLA designated Hazardous Substances, as listed in 40 CFR Table 302.4. designated Hazardous Substances, as listed in 40 CFR Table 302.4. Some organotin compounds could be classified as pollutants or contaminants, as described by section 101(33) of CERCLA. Section contaminants, as described by section 101(33) of CERCLA. Section III.A. of this report discusses the potential health threats III.A. of this report discusses the potential health threats associated with the PVC resin, during thermal decomposition, and the oganotin compounds. The analytical data presented above is a summary of the most significant data available from the aforementioned reports.

The mechanism for past releases at the VVS Site appears to have been spills, poor housekeeping practices and illegal disposal practices. It is reported that there are buried drums in the

vicinity of Area A and asbestos buried somewhere on the property. The mechanism for future releases to the air and soil include deterioration of the containers, and improper disturbance of the containers and asbestos by trespassers documented to have entered the building. A fire in the area where the PVC resin is present could result in a release of hydrochloric acid and vinyl chloride vapors to the nearby residential community. Gloucester City Emergency Management Coordinator (EMC), a release of smoke was simulated using CAMEO and the results indicated that, based on the prevailing winds, the plume would spread over the senior citizens apartment complex and the remainder of Gloucester city.

Site assessment activities/observations

The following EPA personnel were directly involved in the Removal Assessment conducted for the Vanguard Vinyl Siding Inc. Site: Nick Magriples (908-906-6930) and Robert Montgomery (908-906-6934) of the Technical Support Section, Edison, New Jersey.

The Technical Support Section conducted site visits on April 1 and April 16, 1992 in order to assess the current status of the site and the magnitude of the situation. Access was provided by the EMC for Gloucester City. On these two days, the OSCs and TAT inspected the structures, conducted air monitoring, completed a preliminary inventory of the materials inside of the buildings, hazard categorized six samples and subsequently collected twelve samples for laboratory analyses.

Hazard categorization testing revealed that the powders believed to be PVC gave off copious amounts of smoke and contained ignitable vapors. OVA readings of the vapors were greater than 1,000 units The material showed slight indications of the above background. presence of chlorine.

Five different powders, white to beige in color, that are believed to be raw materials, were sent for confirmatory laboratory analysis for product identification by an Infra-Red method. samples (VIR1) was collected from material spilled in the QC laboratory powder located on the west side of the building. other four samples (VIR2 - VIR5) were collected from material either accumulated in 4x4x4 foot open top boxes or spilled from damaged containers. It was suspected that these materials were either PVC resin or stabilizers used in the production process. Four of the five samples were found to contain PVC resins.

Two of the samples (VA-1, VA-2) sent for laboratory analysis were collected from the courtyards at the center of the building. Amidst the grass in this area were indications of a fine, fibrous, white powder that appeared to continue with depth. Based on the reports of buried asbestos material and the physical appearance of this material, these samples were sent to a laboratory for asbestos analysis by the Polarized Light Microscopy (PLM) method. - The samples were found to contain 2-3% chrysotile asbestos.

Samples were collected from five drums at the site and sent for Target Compound List/Target Analyte List (TCL/TAL) analyses (see Section II.A.3). This data is considered preliminary since the quality control validation has not been completed.

Air monitoring conducted in the abandoned structure and around the outside of the facility using an OVA, HNU, explosimeter and radiation meter did not detect any readings above background. While sampling the containers on April 16, readings greater than 1,000 units above background were detected in two of the drums. One of these were located outside of the building on the northern end.

According to the EMC, there are four transformers at the site. One is located outside of the building on the east side along the fence line, another is located outside the building on the north side within a fenced area that has been damaged, and two are within a fenced area in the courtyard. The EMC believes that some of these may contain PCB fluids within. The transformers themselves do not appear to have been damaged, however the fence around the one on the northern end has been damaged and now serves as one of the points of access into the building.

It should be noted that the contents of the white silos on the northern end of the site were not determined. It is reported that at the time VVS was operating, they were used for storage of PVC resin. A large black/brown silo on the roof of building was noted to be empty based on observations from an opening at the bottom. Additionally, there is a large amount of finished vinyl siding and other similar products stored inside the southern end of the building.

5. NPL status

VVS is not a National Priorities List (NPL) site. The Agency of Toxic Substances and Disease Registry (ATSDR) has not been requested to conduct a health assessment for the site.

B. Other Actions to Date

Previous actions

There have been no other previous Federal actions taken at the site.

Current actions

Currently, there are no Federal actions taking place at the site.

C. State and Local Authorities' Role

State and local actions to date

The NJDEPE sent a letter to the Emergency and Remedial Response Division (ERRD) requesting that EPA stabilize the site by repairing the fence; sealing all access points into the building; and sampling, characterizing and disposing of all chemical and asbestos related material.

Notices of Violation issued by the Department to Vanguard on November 5, 1986 and August 8, 1991 were met without response. ITT Diversified Credit corporation, the mortgage holding company, refuses to foreclose on the property as it would trigger the Environmental Cleanup Responsibility Act (ECRA). According to the NJDEPE, ITT views the mortgage as uncollectible and has thus distanced itself from all cleanup responsibilities.

Potential for continued state/local response

Other than discussed above, there are no other State/local actions taking place at the site.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threat's to the Public Health or Welfare

The threat of exposure through direct human contact with the abandoned containers of contaminated oils, pigments, organotin stabilizers, and exposed asbestos is present at VVS. The fenced property and the building itself has been accessed as evidenced by fire charred floors, graffiti and a skateboarding ramp. The EMC has reportedly spoken with some of these children entering the site and warned them of the dangers present inside of the building.

The threat of a serious release resulting from a fire exists, due to vandalism. Spot fires have been documented by the Gloucester City Fire Department and there locations noted during recent site visits. There are large amounts of paper debris scattered throughout the building and a portion of the building, including the roof, is constructed of wood. A fire would result in degradation of the PVC resin, of which 20-30 tons are estimated to be present within the buildings, and the subsequent release of harmful substances.

The release would affect a residential neighborhood which begins approximately 1,000 feet from the site. There are numerous schools and churches in this area, as well as a senior citizens apartment complex, within a half-mile of the site. Although a fence surrounds VVS, there are holes cut in several areas of the fence that allow for access to the site. The building itself has

numerous access points ranging from open doors to broken windows and holes in the walls.

Although PVC resin is neither a CERCLA designated Hazardous Substance nor a pollutant or contaminant, other situations or factors exist that constitute a significant threat. Additionally, there does not appear to be any other available mechanisms for response from either the owners, the NJDEPE or Gloucester City.

PVC is very difficult to ignite and will not burn freely unless there is a supporting flame. PVC can not be the source of ignition for a fire. However, unplasticized PVC softens as it burns, producing white smoke and acrid fumes, which can be corrosive. Pvc search at Ohio State University has revealed that the amount of hydrogen chloride released increases considerably (almost exponentially) with the greater the intensity of the fire. Also exponentially) with the greater the intensity of the fire. Also exponentials is less. The onset of thermal degradation of PVC plastic materials is less. The onset of thermal degradation of PVC occurs at a range of 505-889 degrees F. A typical fire burns at approximately 1,600 degrees F. PVC generates a heat of combustion of approximately 17,910 BTU/pound. As a comparison, wood and polyethylene film generate 8,613 BTU/pound and 19,161 BTU/pound, respectively.

The possible final combustion products of PVC are carbon, carbon dioxide, carbon monoxide, water and hydrogen chloride, an irritant gas that forms hydrochloric acid when it dissolves in water. Possible intermediate compounds that may form include formaldehyde, acetaldehyde and acrolein. When exposed to these elevated acetaldehyde and acrolein acrolein thermally decompose to temperatures, polyvinyl polymers also often thermally decompose to their respective monomers. In the case of PVC, the monomer is vinyl chloride.

When inhaled, hydrogen chloride gas may cause serious destructive damage to the mucous membranes. Furthermore, carbon particulates in smoke adsorb hydrogen chloride. When smoke is inhaled, these particulates are likely to bypass the body's upper respiratory system mucous membranes and become lodged in the lungs, where hydrogen chloride may cause pulmonary edema.

Exposure to vinyl chloride can cause dizziness, light-headedness, nausea, dullness of visual and auditory responses, drowsiness and unconsciousness. Irritation of the skin and eyes can also occur. OSHA's short term exposure limit (STEL), based on a 15-minute sampling period, is 5 ppm. Vinyl chloride is considered a potential human carcinogen.

Exposure to formaldehyde gas can cause irritation to the mucous membranes of the respiratory tract and eyes, pulmonary edema, tightening of the chest, sensation of pressure in the head and palpitations of the heart. Hives have been reported following inhalation of gas. Death due to respiratory failure at higher

concentrations has been reported in humans. OSHA's STEL, is 2 ppm. Formaldehyde, considered a potential human carcinogen, may react with hydrogen chloride in warm, moist air to form bischloromethyl ether, a carcinogen.

Acrolein has a strongly disagreeable odor that produces intense irritation to the eye and mucous membranes of the respiratory Skin burns and dermatitis may result from prolonged Although acetaldehyde does not have as pungent of an odor as acrolein, it does produce similar health effects. Additionally, at acute exposures, it can result in pulmonary edema.

Although organotin compounds are not CERCLA hazardous substances, certain ones (tributyl and dibutyl compounds) can cause acute burn burns to the skin, however they heal rapidly without scarring upon separation from the source. Others such as trialkyl and tetraalkyl compounds are toxic when ingested. They can cause damage to the central nervous system with symptoms of headaches, dizziness, photophobia, vomiting and urinary retention, some weakness and flaccid paralysis of the limbs in the most severe cases.

Threats to the Environment

Hazardous substances, particularly volatile organic compounds and asbestos, are present in the soils at the site. Additionally, it has been reported that drums may have been buried in the vicinity of Area A. The NJDEPE discovered magnetic anomalies in this area and it appears that asphalt has been haphazardly poured on the ground.

Although the location and quantities of materials in the building, for the most part, preclude a release to the Delaware River, a fire or explosion, and the resultant use of water for extinguishment, could result in a diluted release of some of these CERCLA designated Hazardous Substances into the Delaware River.

Other than discussed above, due to the industrial nature of the immediate area around VVS, there does not appear to be a significant threat to sensitive ecosystems or an exposure to hazardous substances by nearby animals and the food chain. ground water in the general area is not known to be used for drinking water purposes.

EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR IV. NOT TAKEN

Delayed action to remove the hazardous substances present at the surface (drums, PVC resin, asbestos) of the site will increase the potential of a serious release occurring should a fire be initiated due to arson, vandalism or incidental trespassing. Although most of the site is fenced, there are access points available along the eastern fenceline, the waterfront, and most sides of the building.

additionally, it has been documented that children enter the site. Spot fires have been noted in the buildings.

PA has not taken any enforcement actions to date. The Office of egional council will be notified of the site and notice letter(s) subsequently issued to all appropriate parties.

**The process the enforcement activities undertaken by the MTDEDE to discusses the enforcement activities undertaken by the NJDEPE to

There has been a release of CERCLA designated Hazardous Substances There has been a release of CERCLA designated Hazardous Substances The threat of exposure through at Vanguard Vinyl Siding, Inc. The threat is present with the abandoned containers is present of the abandoned containers. at vanguard vinyl Siding, Inc. The threat of exposure through direct human contact with the abandoned containers is present. The VI. CONCLUSIONS site is accessible and has been used by children in the past.

The threat of a serious release resulting from a fire exists, due the threat of a serious release resulting from a fire exists, que to vandalism. A fire would result in the degradation of notentially large amounts of the pure resin and the subsequent vanualism. A lire would result in the degradation of the pvc resin, and the subsequent potentially large amounts of the pvc resin, and the subsequent release of harmful substances.

The release would affect a release of harmful substances. residential neighborhood which begins approximately 1,000 feet from

A CERCLA Removal Action is recommended for Vanguard Vinyl Siding, A CERCIA Removal Action is recommended for vanguard vinyi Siding, and Spilled containerized and spilled containerized the asbestos the action should address the building; the boxed and spilled put material present in how containers; the boxed and spilled put material present in how containers; the site. materials poth inside and outside of the boxed and spilled pyc material present in box containers; the boxed and spilled pyc material present in box containers;

The asbestos inside the courtyard, which may be the area where it was reportedly buried, should be either be addressed in a way as to was reportedly purred, Should be extiled be addressed in a way as to minimize potential contact to trespassers entering the site or an attack to trespassers entering the site of a site contaminated with PCBs. attempt should be made to secure the building. It should be noted that a northion of the building. that a portion of the building's walls are made of transite, an asbestos containing material, which has been damaged in numerous

With regards to the PVC material, the OSC has been informed by the Gloucester City EMC that there was a third party interested in obtaining all of the DVC regin for reformulation and finished Gloucester City EMC that there was a third party interested in obtaining all of the PVC resin for reformulation and finished locations. product for resale.

ATTACHMENT Q

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278

ACTION MEMORANDUM

DATE:

SFP 28 1992

SUBJECT:

Request for a Removal Action at the Vanguard Vinyl

Siding Site, Gloucester City, Camden County, New Jersey

FROM:

Thomas Budroe, On-Scene Coordinator

Removal Action Branch - Technical Support Section

TO:

Constantine Sidamon-Eristoff

Regional Administrator

THRU:

Kathleen C. Callahan, Director

Emergency and Remedial Response Division

Site ID# 9E

I. PURPOSE

This Action Memorandum requests and documents approval of the proposed removal action described herein for the Vanguard Vinyl Siding (VVS) Site, an abandoned vinyl siding manufacturing facility located at the foot of Water and Charles Streets, Gloucester City, New Jersey. The funding requested in this memorandum is necessary to remove and dispose of the hazardous wastes present at the site. The proposed removal action is anticipated to cost \$800,000, of which \$590,000 is from the regional removal allowance.

II. SITE CONDITIONS AND BACKGROUND

The Comprehensive Environmental Response, Compensation, and Liability Information System ID number for this time critical removal action is NJD982530073.

A. Site Description

1. Removal site evaluation

From 1950 through the 1960's the Ruberoid Corporation produced asbestos piping and asbestos shingles at this location. From 1981 to 1983, VVS operated and produced plastic siding for homes and other buildings. Many of the raw materials, including

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polyvinyl chloride (PVC) resin, stabilizers, plasticizers and pigments, remain at the facility. Operations at the site in support of process operations included: a machine shop, die shop, electrical shop, millwright shop, a welding shop and a quality control laboratory.

On March 6, 1985, samples were collected by the owner's consultant as part of an initial site evaluation. Soil samples collected from Area A indicated the presence of petroleum hydrocarbons (9,080 parts per million (ppm)), 1,2-dichloroethane (1.08 ppm) and tetrachloroethane (0.70 ppm and di-n-octyl phthalate (11.5 ppm). Samples collected from Area B indicated elevated levels of petroleum hydrocarbons (15,800 ppm), trans-1,2-dichloroethylene (2.70 ppm) and trans-1,3-dichloropropylene (2.01 ppm). Samples collected from Area C indicated PVC resins, pigments and low levels of volatile organics and lead (see Attachment A).

According to the inventory of drums taken by the owner's consultant there are approximately 50 to 70 varying size containers inside and outside the buildings containing oils, pigments, organotin stabilizers, asbestos, PVC resin and some unknowns and 60 to 70 boxes of powders within the buildings. The floors of some of the rooms are covered with pigment, asbestos or PVC powder.

Drum samples collected by the Technical Assistance Team (TAT) on April 16, 1992, detected the presence of elevated levels of tetrachloroethylene, toluene and xylene. PVC resin was confirmed to be present in large volumes. In addition soil samples were taken which contained asbestos in concentrations of 2 to 3%.

2. Physical location

The VVS Site is located at the foot of Charles and Water Streets in Gloucester City, Camden County, New Jersey. The site occupies approximately 2.06 acres, listed as Block 110, Lot 3B, in an industrial section of the city. The site is bounded by Water Street to the east, a vacant facility owned by GAF to the south, the Delaware River to the west and Koch Fuel Terminal to the north (see Figure 1). The nearest residential area is located less than 1,000 feet from the site. A large apartment complex (Gloucester Town), housing an estimated 100-200 senior citizens, is located approximately 2,000 feet northeast of the facility and several schools, parks and playgrounds are less than 0.5 miles from the site.

3. Site characteristics

Historical site activities in the 1950s and 1960s, while under ownership by the Ruberoid Corporation (merged with GAF in 1967), included the production of asbestos piping and asbestos shingle. VVS operated at the site from 1981 through 1983. During its operations, VVS produced plastic siding for homes and other buildings. It is reported that the raw materials, including PVC

resin, stabilizers, plasticizers and pigments were delivered by truck or rail car. The resin was stored in silos and mixed with the stabilizers and pigments. After blending, the mixture was extruded in one of six process operations.

The VVS Site consists of two buildings, Manufacturing Building Numbers 3 and 10, that have been interconnected by smaller structures. Area A was a loading and shipping area located on the north side of Building 3. Raw materials and finished products were received and shipped from this area. Three silos used for storing vinyl pellets are located between the loading area and the manufacturing building. Sampling results from 1985 verified that a spill occurred in Area B. The release was from a drum storage rack located outside Manufacturing Building 3. Area C is located inside the plant and consists of an area of exposed ground surrounded by concrete flooring (see Attachment A).

It should be noted that a portion of the building's walls are made of transite, an asbestos containing material, which has been damaged in numerous locations.

From recent analysis, the presence of asbestos has been confirmed in several locations. Records reveal that asbestos products were both manufactured and used in these buildings in the past. Therefore, there is a strong possibility that the heavy coating of material covering the floors and contents of the buildings contains high concentrations of asbestos.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Analytical results collected by the owner's consultant on March 6, 1985 indicated the presence of petroleum hydrocarbons (9,080 ppm), 1,2-dichloroethane (1.08 ppm), tetrachloroethane (0.70 ppm), and di-n-octyl phthalate (11.5 ppm) in soil samples collected from Area A. Area B indicated elevated levels of petroleum hydrocarbons (15,800 ppm), trans-1,2-dichloroethylene (2.70 ppm) and trans-1,3-dichloropropylene (2.01 ppm). Samples collected from Area C indicated PVC resins, pigments and low levels of volatile organics and lead.

According to an inventory of drums developed by the same consultant, and confirmed by the Technical Support Section (TSS) of the Removal Action Branch on subsequent site visits, there are approximately 50 to 70 containers of varying sizes within and outside of the buildings containing oils, pigments, organotin stabilizers, asbestos, PVC resins and some unknowns; 60 to 70 boxes (65 cubic feet each) of powders that may be PVC resin; and 35 bags of an unknown powder contained within the buildings at the VVS Site. The floors of some of the rooms are covered in either pigment, asbestos or PVC powder. There are also 30 to 50 empty containers, and large amounts of debris and finished PVC products scattered throughout the buildings.

Open and broken containers, in addition to stains on the walls and floors of the laboratory and an adjacent office, are evidence that a discharge of unknown materials has occurred. Small quantity containers are strewn throughout the building.

At least one drum is labelled diethylhexyl phthalate, a listed hazardous waste contained in the 40 CFR part 261 Section 33.

Laboratory analysis from samples collected by the TSS on April 16, 1992, detected elevated levels of tetrachloroethylene, toluene and xylene in some of the drums present on-site. Additionally, the presence of PVC resin and asbestos related material (chrysotile) at 2 to 3% was confirmed in several of the samples.

All of the materials listed above, except for the petroleum hydrocarbons, PVC resin and organotin compounds, are Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) designated Hazardous Substances, as listed in 40 CFR Table 302.4. Some organotin compounds are pollutants or contaminants, as described by Section 101(33) of CERCLA.

Two of the samples (VA-1, VA-2) sent for laboratory analysis were collected from the courtyards at the center of the building. Based on the reports of buried asbestos material and the physical appearance of this material, these samples were sent to a laboratory for asbestos analysis by the Polarized Light Microscopy method. The samples were found to contain 2 to 3% chrysotile asbestos.

The mechanism for past releases at the VVS Site appears to have been spills, poor housekeeping practices and illegal disposal practices. It is reported that there are buried drums in the vicinity of Area A and that asbestos is also buried somewhere on the property. The mechanism for future releases to the air and soil include deterioration of the containers, and improper disturbance of the containers and asbestos by trespassers (trespassing has been documented).

A fire in the area where the PVC resin is present could result in a release of hydrochloric acid and vinyl chloride vapors to the nearby residential community. According to the Gloucester City Emergency Management Coordinator, a release of smoke was simulated using Computer-Aided Management of Emergency Operations (CAMEO) and the results indicated that, based on the prevailing winds, the plume would spread over the senior citizens apartment complex and the remainder of Gloucester City.

5. National Priorities List (NPL) status

This site has not been designated or proposed for designation as an NPL site.

6. Maps, pictures and other graphic representations

See Attachment A.

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B. Other Actions to Date

1. Previous actions

The only actions undertaken by the Potentially Responsible Party (PRPs) was the sampling of Areas A, B and C in 1984 (see Figure 2, Attachment A).

A pre-sampling assessment conducted by the New Jersey Department of Environmental Protection and Energy (NJDEPE), on February 20, 1992, indicated the presence of approximately 30 containers of varying sizes and conditions. Labels indicated the drums contained ethylene glycol, oils, solvents, asbestos, 2-diethylhexyl phthalate, acrylic resin and titanium pigment. In addition, several unlabeled drums and shattered laboratory reagents were found throughout the lab area.

The NJDEPE submitted the VVS Site to the Environmental Protection Agency (EPA) for a CERCLA removal action on March 11, 1992. In response to the continued threat posed by the site, the NJDEPE requested that EPA stabilize the site and characterize, overpack and dispose of all chemical and asbestos related material to safeguard the health and welfare of the local population. EPA responded to this request with a removal site evaluation and sampling to characterize the site.

2. Current actions

Other than actions described herein, no mitigative action is presently planned or underway by EPA, NJDEPE or the PRP.

C. State and Local Authorities' Roles

1. State and local actions to date

VVS did not respond to Notices of Violation issued by NJDEPE on November 5, 1986 and August 8, 1991. The current mortgage holding company, ITT Diversified Credit Corporation, refuses property foreclosure, since it would trigger an Environmental Cleanup Responsibility Act (ECRA) response. Since the mortgage is uncollectible, ITT Diversified Credit Corporation has distanced itself from any cleanup responsibilities.

2. Potential for continued state/local response

State and local agencies could not undertake removal of the contaminants in a timely manner. However, NJDEPE's ECRA Program will be addressing any residual contamination not addressed by this removal action.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Statutory and Regulatory Authorities

The following criteria from Section 300.415(b)(2) of the National Contingency Plan are directly applicable to the VVS Site:

- (i) actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants:
- (ii) actual or potential contamination of drinking water supplies or sensitive ecosystems;
- (iii) hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- (iv) high levels of hazardous substances or pollutants or contaminants in the soils largely at or near the surface may migrate;
- (vi) threat of fire or explosion; and
- (vii) the lack of availability of other appropriate
 Federal or state response mechanisms to respond to
 the release.

B. Threats to Public Health and Welfare

The threat of exposure through direct human contact with containers of contaminated oils, plasticizers, solvents, pigments, organotin stabilizers, and asbestos is present at the site. The property and the buildings have been accessed by trespassers as evidenced by fires, graffiti and skateboarding ramps. The Gloucester City Fire Department has documented fires that have occurred over the years. These locations were noted during the recent site visits. There is a large amount of paper debris scattered throughout the building. In addition, the majority of the building structure is comprised of wood. A fire would result in the degradation of the PVC resin, of which 20 to 30 tons are estimated to be present within the buildings, releasing hazardous substances into the environment.

The release would affect a residential neighborhood located 1,000 feet from the site. In addition, there are numerous schools, churches and a senior citizens apartment complex located within a half-mile of the site. The site is unsecured, allowing unauthorized access though holes in the fence and windows. There are also numerous opened doors, broken windows and holes in the walls of the building.

PVC resin is neither a CERCLA designated Hazardous Substance nor a pollutant or contaminant. However, when heated, PVC produces a white smoke and acrid fumes which can be corrosive. Scientific study indicates the amount of hydrogen chloride gas evolution

increases almost exponentially, relative to fire intensity. The onset of thermal degradation of PVC occurs at within the range of 500 to 889 degrees F. A typical fire burns at 1,600 degrees F.

The final combustion products of PVC are carbon, carbon dioxide, carbon monoxide, water and hydrogen chloride and an irritant acid gas that forms hydrochloric acid when dissolved in water. Possible intermediate compounds formed include formaldehyde, acetaldehyde and acrolein. In elevated temperatures, polyvinyl polymers thermally decompose to their respective monomers. A monomer of PVC is vinyl chloride.

When inhaled, hydrogen chloride gas may cause damage to the mucous membranes. Furthermore, carbon particulates in the smoke absorb hydrogen chloride. When the smoke is inhaled, the particulates bypass the upper respiratory system and becomes lodged in the lungs, where hydrogen chloride may cause pulmonary edema.

Exposure to vinyl chloride can cause dizziness, light-headiness, nausea, dullness of visual and auditory responses, drowsiness and unconsciousness. Skin and eye irritation is also likely. The American Conference of Governmental Industrial Hygienists (ACGIH) Short Term Exposure Limit (STEL), based on a 15-minute period is 5 ppm. Vinyl chloride is considered a potential human carcinogen.

Exposure to formaldehyde gas can cause irritation to the mucous membranes of the respiratory tract and eyes, pulmonary edema, tightening of the chest, sensation of pressure in the head and palpitations of the heart. Death by respiratory failure may occur during exposure to high concentrations. ACGIH'S STEL for formaldehyde gas is 2 ppm. Formaldehyde may react with hydrogen chloride in warm, moist air to form bis-chloromethyl ether, a carcinogen.

Acrolein produces intense irritation to the eyes and mucus membranes of the respiratory tract and can result in pulmonary edema with acute exposure. Skin burns and dermatitis may result from long exposure.

Although organotin compounds are not specifically designated CERCLA hazardous substances under 40 CFR 302.4, tributyl and dibutyl tin compounds can cause acute burns to the skin. Trialkyl and tetraalkyl tin compounds are toxic when ingested. They cause damage to the central nervous system and flaccid paralysis of the limbs in severe cases. Thus, these compounds are considered to be pollutants or contaminants under CERCLA.

Drums which may be buried on-site that do not pose a contact hazard and asbestos material either outside the building or asbestos which does not pose a hazard to cleanup operations will be addressed in a separate action.

C. Threats to the Environment

Analytical results have identified volatile organic compounds and asbestos present at the site. At least one transformer is labelled to contain polychlorinated biphenols (PCBs). Additionally, the NJDEPE reports that drums may have been buried in the vicinity of Area A (see Figure 2, Attachment A).

The location and quantity of materials in the buildings does not preclude a direct release into the Delaware River. A fire or explosion could cause a diluted release of CERCLA Hazardous Substances, by runoff from extinguishment activities, into the Delaware River located at the sites perimeter.

Hazardous substances, particularly volatile organic compounds and asbestos, are present in the soils at the site. Additionally, it has been reported that drums may have been buried in the vicinity of Area A and that asphalt has been haphazardly poured on the ground. The NJDEPE discovered magnetic anomalies in this area.

Due to the industrial nature of the immediate area surrounding the site, there does not appear to be a significant threat to sensitive ecosystems or an exposure to hazardous substances by animals or the food chain. The ground water is not used for drinking water purposes.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The objective of this project is to eliminate the threat of direct contact currently posed at the VVS Site. The proposed mitigative measures include the removal of CERCLA Hazardous Substances and PVC material inside and outside the facility. Disposal of all wastestreams will comply with EPA Resource Conservation and Recovery Act (RCRA) policies.

Asbestos material inside the structure posing a significant hazard to operations personnel will be containerized and/or otherwise stabilized and stored. In addition to protecting the health of workers, stabilization operations will stop further spreading of the asbestos to locations outside the building and avoid equipment contamination. This clean up action will not

address the disposal of the asbestos since determining the amount and locations of this material would require a significant allocation of funds and time. Moreover, the asbestos cleanup may be conducted by possible future PRP involvement.

Historical unconfirmed reports indicate buried drums of unknown substances may be located on-site. This action will seek to determine if buried drums exist on-site. Because the presence and quantity of buried drums is uncertain and again, the possibility of future PRP involvement, excavation and disposal of buried drums will not be addressed by this action.

This action will address materials constituting an immediate threat as defined by CERCLA. However, given the threat of fire/explosion by vandals entering the site, the existing fence will remain as a means of post-removal site control. The site will be referred to the NJDEPE for possible remediation work if necessary.

2. Contribution to remedial performance

The VVS Site has not been designated as a NPL site. There is no long term remedial plan at this time. Responsibility for this site will be referred to NJDEPE upon completion of this removal action. Actions proposed at this site will address the threats this site poses as described in Section III.

It is probable that the site will then be evaluated for applicability under NJDEPE's ECRA Program. The proposed actions are consistent with any future remedial actions.

3. Descriptions of alternative technologies

Resource recovery and recycling options will be explored and utilized to the greatest extent possible.

4. Engineering Evaluation/Cost Analysis (EE/CA)

Since the proposed removal action is time-critical the section is not applicable.

5. Applicable or relevant and appropriate requirements (ARARS)

ARARS within the scope of the action described herein, will be attained to the extent practicable. All CERCLA, RCRA, and Toxic Substances Control Act regulatory concerns as they pertain to the removal, transportation and disposal of on-site contaminants will be addressed.

6. Project schedule

The EPA will require a minimum of two (2) months to conduct the required activities described in this memorandum. The removal action can be initiated within one (1) month upon approval of this memorandum. Refer to Attachment B, "Project Schedule and Estimated Costs" for detailed breakdown of the project.

B. ESTIMATED COSTS

Extramural Costs:

Regional Allowance Costs:

| Extramural Clea | | • | |
|-----------------|----|--------|-----|
| with Contingend | cy | \$590, | 000 |

| Other Extramural Costs Not Funded From the Regional Allowance | : |
|---|---|
| Total TAT\$ 29,430 | |
| Subtotal, Extramural Costs\$619,430 | |
| 15% Extramural Costs\$ 92,914 | |
| TOTAL EXTRAMURAL COSTS AND | |
| CONTINGENCIES \$712.344 | |

| <pre>Intramural Costs:</pre> |
|------------------------------------|
| Intramural Direct Costs\$ 13,200 |
| (HQ, Region, and ERT) |
| Intramural Indirect Costs\$ 40,000 |
| PROJECT CEILING\$765,544 |
| ROUNDED\$766,000 |

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action will increase the health risks to anyone coming in contact with the site. Deleterious effects upon the indigenous species population may be compounded.

The threat of a serious release from a fire exists, due to vandalism and documented evidence of previous incendiary fires. A fire would result in the degradation of a large amount of PVC resin and the subsequent release of harmful substances. The release would affect a residential neighborhood located 1,000 feet from the site.

Run-off from fire fighting efforts may also introduce pollutants and contaminants into the Delaware River.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

VVS did not respond to Notices of Violation issued by NJDEPE on November 5, 1986 and August 8, 1991. ITT Diversified Credit Corporation, the mortgage holding company, refuses to foreclose on the property as it would trigger an ECRA. According to the NJDEPE, ITT views the mortgage as uncollectible and has thus distanced itself from all cleanup responsibilities.

Federal enforcement action has been initiated with a search for other PRPs including informally contacting the GAF corporation. As information becomes available, formal enforcement activities will commence.

IX. RECOMMENDATION

This decision document represents the selected removal action for the VVS Site in Gloucester City, Camden County, New Jersey, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan (NCP).

Conditions at the site meet criteria for a removal under the NCP Section 300.415(b)(2) and I recommend your approval of the proposed removal action. The total project ceiling if approved will be \$800,000, of which \$590,000 is coming from the Regional removal allowance. Sufficient funding is available in our current advice of allowance to finance this project.

Please indicate your approval and authorization of funding for the VVS Site, as per current Delegation of Authority, by signing below.

| Approval: Sala | 7 Date: 9/30/92 | / |
|------------------------|-----------------|---|
| Constantine Sidamon-E | ristoff | |
| Regional Administrator | r (/ | |
| | . / | |
| Disapproval: | | |
| Constantine Sidamor | n-Eristoff | |
| Pegional Administra | ator | |

cc: (after approval is obtained)

W. Muszynski, DRA

K. Callahan, ERRD-D

R. Salkie, ERR-ADREPP

J. Frisco, 2ERR-DDNJP

G. Zachos, ERR-RAB

J. Witkowski, ERR-RAB-TSS

M. Pane, ERR-RAB-A

J. Marshall, 2EPD

J. McVeigh, 20RC-NJSUP

R. Gherardi, OPM-FIN

P. Cutts, OPM-FAM

C. Moyik, ERRD-PS

M. Mjoness, OS-210

L. Miller, NJDEPE

K. Kloo, NJDEPE

C. Kelley, TATL

ATTACHMENT A MAPS AND OTHER GRAPHICS

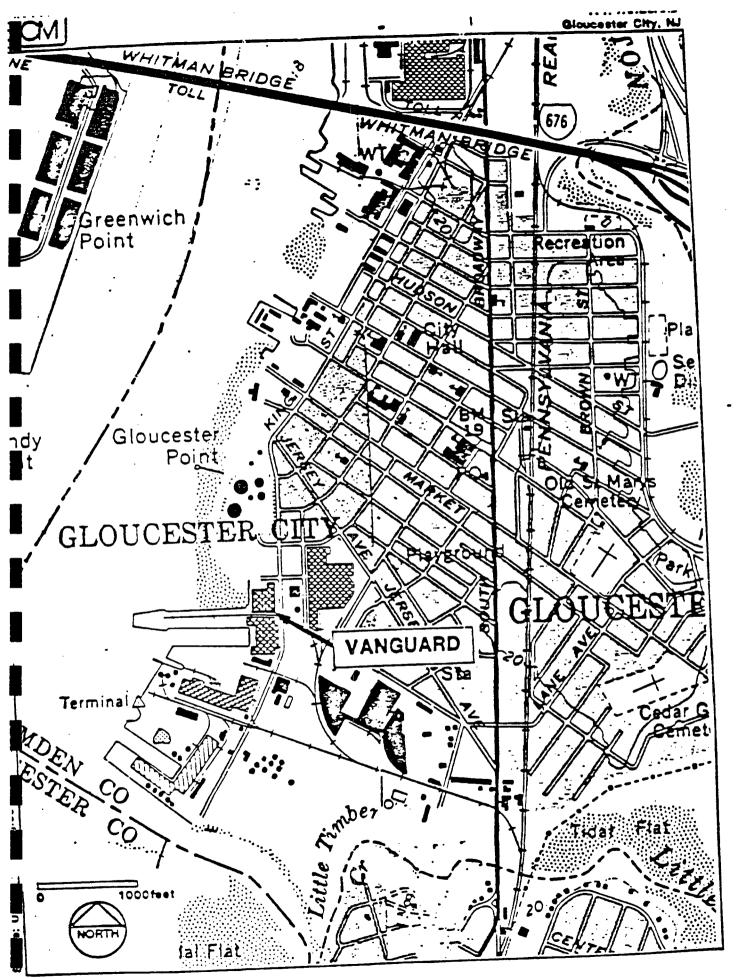
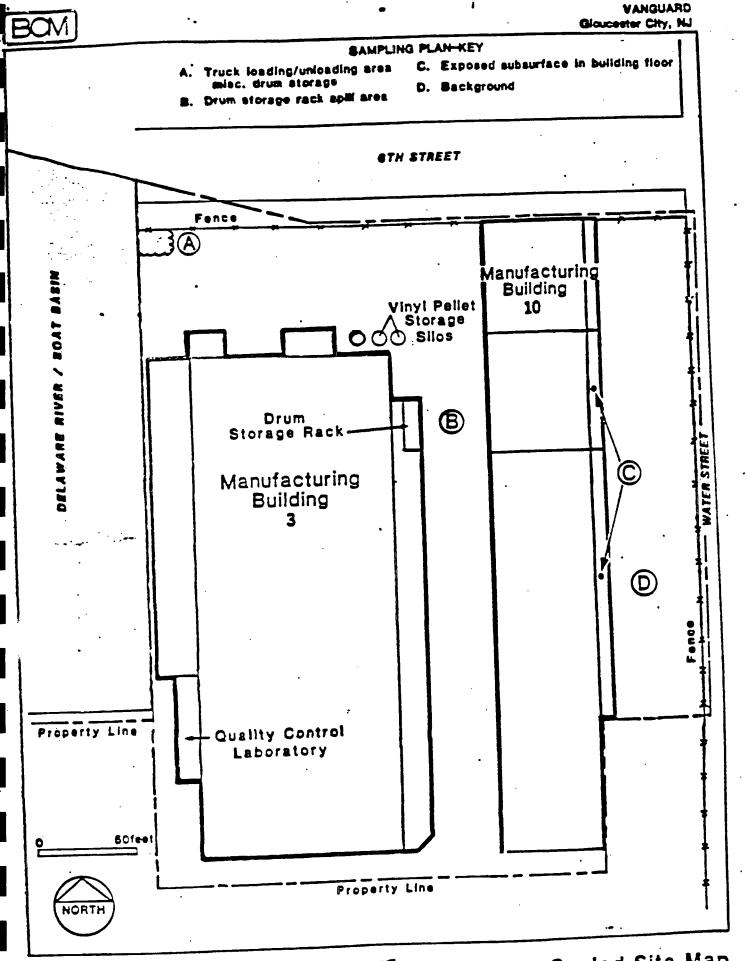


FIGURE 1 USGS Location Map



ATTACHMENT B
PROJECT SCHEDULE AND ESTIMATED COSTS

ATTACHMENT IN

DETAILED COST ESTIMATE VANGUARD VINYL SIDING SITE GLOUCESTER CITY, CAMDEN COUNTY, NEW JERSEY

The costs detailed below are for the mitigative measures detailed in this memorandum. See Section V,B. for a summary of funds authorized under the previous action memorandums and funds requested in the current action memorandum.

I. EXTRAMURAL COSTS

A. ERCS Contractor Costs

Removal activities are expected to require approximately two to three months of on-site activity and will consist of the following: mobilization; sampling, asbestos abatement, analysis and disposal of containerized hazardous materials; decontamination of buildings and vessels; labpacking of all laboratory containers; and demobilization. The estimated schedule and associated costs are subject to fluctuation depending upon transportation and disposal scheduling, and the degree to which recycling can be utilized as a method of disposal.

1. Mobilization

| (1) | Response Manager | \$51.54/hr.x 50 hr. | Ś | 2,577.00 |
|--------------|---|------------------------|-------------------------------|-----------|
| (1) | Field Clerk | \$31.50/hr.x 40 hr. | č | 1,260.00 |
| (-) | Overtime | \$47.25/hr.x 10 hr. | ๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛ | 472.50 |
| (1) | Foreman | \$34.91/hr.x 40 hr. | č | 1,396.40 |
| (1) | Overtime | | 4 | 523.60 |
| / 2.\ | - · - · - · - · - · · - · · · - · · · · | \$52.36/hr.x 10 hr. | Ş | 323.00 |
| (2) | Laborer | \$24.15/hr.x 40 hr. | ş | 1,932.00 |
| 4 - 1 | Overtime | \$36.22/hr.x 10 hr. | Ş | 724.40 |
| (1) | Chemist | \$54.60/hr.x 20 hr. | Ş | 1,092.00 |
| | Overtime | \$81.90/hr.x 4 hr. | Ş | 327.60 |
| (1) | Sample Technician | \$28.35/hr.x 10 hr. | \$ | 283.50 |
| | Overtime | \$42.52/hr.x 4 hr. | \$ | 170.08 |
| (7) | Subsistence Cost | \$96/day x 7 day | \$ | 4,704.00 |
| (1) | Office Trailer | \$500/mo. x 3 mo. | \$ | 1,500.00 |
| (1) | Decon Trailer | \$1,100/mo. x 2 mo. | \$ | 2,200.00 |
| (2) | Porta-John | \$100/mo. x 3 mo. | \$ | 600.00 |
| (1) | | \$750/mo. x 2 mo. | Ś | 1,500.00 |
| (1) | Double Di. Pump | \$600/mo. x 2 mo. | Š | 1,200.00 |
| (1) | Portable Computer | \$350/mo. x 2 mo. | Š | 700.00 |
| (1) | Pickup Truck | \$1,000/mo. x 2 mo. | Š | 2,000.00 |
| | Passenger Car | \$550/mo. x 2 mo. | Š | 2,200.00 |
| | Bobcat | \$2000/mo.x 2 mo. | č | 4,000.00 |
| | | | ٠ | 2,000.00 |
| | HEPA Vacuum | \$1000/mo.x 2 mo. | Ş | 2,000.00 |
| (1) | Watercooler | \$100/mo. x 3 mo. | Þ | 300.00 |
| Other | | | _ | |
| | cric/Phone Service | | \$ | |
| Offic | ce Support (fax, cop | ier, etc.) | \$ | 1,000.00 |
| Misce | ellaneous (air monito | oring equip., portable | | |
| | radios, exp | pendables, etc.) | \$ | 10,000.00 |
| | • | | | |

Subtotal

\$ 46,663.08

| 2. | Mitigative Actions | (as described in Section | V,5.) |
|------------|--|---|---|
| (1) (1) | Response Manager Field Clerk Overtime | \$51.54/hr.x 200 hr. \$31.50/hr.x 200 hr. \$47.25/hr.x 40 hr. | \$ 10,308.00 \$ 6,300.00 \$ 1,890.00 |
| (1) | Foreman Overtime | \$34.91/hr.x 200 hr. \$52.36/hr.x 40 hr. | \$ 6,982.20 \$ 2,094.40 |
| (3) | Laborer Overtime | \$24.15/hr.x 200 hr. \$36.22/hr.x 40 hr. | \$ 6,300.00 \$ 1,890.00 \$ 6,982.20 \$ 2,094.40 \$ 14,490.00 \$ 4,346.40 \$ 5,460.00 \$ 1,638.00 \$ 2,835.00 \$ 850.40 |
| (1) | Chemist Overtime | \$54.60/hr.x 100 hr. \$81.90/hr.x 20 hr. | \$ 5,460.00 \$ 1,638.00 |
| (1) | Sample Technician Overtime | \$28.35/hr.x 100 hr. \$42.52/hr.x 20 hr. | \$ 2,835.00 \$ 850.40 |
| (8) | Subsistence Cost | \$96/day x day | \$ 23,040.00 |
| Anal | ontractor, asbestos ERCS G8 ytical Services (est | &A (15%) timated) &A (15%) | \$200,000.00 \$ 30,000.00 \$ 40,000.00 \$ 60,00.00 \$ 85,000.00 \$ 12,750.00 |
| | | Subtotal | \$453,984.40 |
| 3. | Demobilization | | |
| (1) (1) | Response Manager Field Clerk Overtime | \$51.54/hr.x 50 hr. \$31.50/hr.x 40 hr. \$47.25/hr.x 10 hr. | \$ 2,577.00 \$ 1,260.00 \$ 472.50 \$ 1,396.40 \$ 523.60 \$ 1,932.00 \$ 724.40 |
| (1) | Foreman Overtime | \$34.91/hr.x 40 hr. \$52.36/hr.x 10 hr. | \$ 1,396.40 \$ 523.60 |
| (2) | Laborer Overtime | \$24.15/hr.x 40 hr. \$36.22/hr.x 10 hr. | \$ 1,932.00 \$ 724.40 |
| (5) | Subsistence Cost | \$96/day x 7 day | \$ 3,360.00 |
| | | Subtotal | \$ 12,245.90 |
| 4. | Total Mitigation C | osts | |
| Dire | ect Mitigation Costs Contingency 15% | | \$512,893.38 \$ 76,934.00 |
| Tota | al Mitigation Costs SAY | | \$589,827.34 \$590,000.00 |
| В. | Region II TAT Cost | s | |
| | 400 field hrs. x \$ 70 office hrs. x \$ | | \$ 26,000.00 \$ 3,430.00 |
| | al TAT Costs al REAC Costs Total Extramural D Contingency 15% | irect Costs | \$ 29,430.00 \$ 30,000.00 \$649,430.00 \$ 97,414.50 |
| | TOTAL EXTRAMURAL C | COSTS | \$746,844.50 |

II. INTRAMURAL COSTS

| A. | <pre>Intramural Direct Costs [800 (Region) + .10 x 800 (HQ) x \$30/hr.]</pre> | \$ 13,200.00 |
|----|---|--------------|
| В. | <pre>Intramural Indirect Costs [800 x \$100/hr.]</pre> | \$ 40,000.00 |
| | TOTAL INTRAMURAL COSTS | \$ 53,200.00 |
| | TOTAL ESTIMATED PROJECT COSTS | \$800,044.50 |
| | ROUNDED ESTIMATED PROJECT COSTS | \$800,000.00 |

14.00

ATTACHMENT C
ENFORCEMENT ADDENDUM

ENFORCEMENT SENSITIVE

ENFORCEMENT ADDENDUM

Vanguard Vinyl Siding Site

Gloucester City, Camden County, New Jersey

A. PRP Search

Enforcement efforts conducted by NJDEPE to date have been unsuccessful in prompting Vanguard to address the removal of hazardous materials remaining on-site. Vanguard Vinyl Siding is not a viable PRP because of bankruptcy. Furthermore, Vanguard's mortgage holding company (ITT) refuses to foreclose on the property as it views the mortgage as uncollectible and would trigger the NJDEPE's ECRA process.

Prior to Vanguard's operations, the Ruberoid Corporation had produced asbestos building materials at the site during the 1950s and 1960s. In 1967, Ruberoid merged with the GAF Corporation and continued to operate at the site until Vanguard's purchase of the property in 1981. Evidence of the production of asbestos products can still be seen throughout the site buildings.

B. <u>Notification of PRPs of Potential Liability and of the Required Removal Action</u>

NJDEPE has issued Notices of Violation to Vanguard in 1986 and again in 1991. Both Notices were met without response.

It is the intention of EPA to issue 104(e) Notice Letters to all PRPs known at this time including Vanguard, ITT and GAF/Ruberoid.

C. <u>Decision Whether to Issue an Order</u>

The agency's decision of whether to issue an order to the PRPs hinges upon the response or lack of response to the Notice Letters. If Orders are issued, it is likely that those issued to Vanguard and ITT would address the abandoned hazardous materials, and GAF's involvement would most likely be limited to asbestos bearing materials.

D. Negotiation and Order Issuance Strategy

Given the urgency of the required actions and the history of NJDEPE's enforcement efforts, it is the intention of the agency to initiate the proposed response actions prior to issuing Notice Letter to the PRPs. In the event that a favorable response is received from any of the PRPs during performance of the removal action, a decision will be made to either complete the required actions or stabilize the hazardous materials pending the outcome of PRP negotiations. At the present time, it is the consensus of PSB, ORC and RAB that GAF's removal of asbestos materials would be the most likely possibility of PRP involvement.

ATTACHMENT R

U.S. ENVIRONMENTAL PROTECTION AGENCY

INITIAL POLLUTION REPORT

Heading I.

Date:

From:

December 15, 1992

W. Sw. Jan 105

Gad Tawadros, OSC, U.S. EPA Region II,

Action Branch

To:

C. Sidamon-Eristoff, EPA-RA

W. Muszynski, EPA DRA

K. Callahan, EPA R. Salkie, EPA

G. Zachos, EPA M. Pane, EPA

J. Marshall, EPA

D. Mellott, EPA

J. McVeith, EPA D. Schwenk, EPA

J. Frisco, EPA

√D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City-OEM

TAT

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP:

POLREP #1 -FIRST AND INITIAL

II. Background

Site No.

9E

0027-02-019

Delivery Order No. Response Authority

CERCLA

ERNS No.

N/A Non-NPL

NPL Status State Notification

NJDEPE Notified

Action Memorandum Status

Approved September 28, 1992 December 10, 1992

Start Date Demobilization Date:

N/A

Completion Date:

N/A

III. Site Information

Α. Incident Category

CERCLA incident category: Inactive Production Facility

B. Site Description

1. Site Background

The Vanquard Vinyl Siding Site (VVS) is located in Gloucester City, Camden County, in an industrial section of southwest New Jersey. The site consists of two connected manufacturing buildings (numbers 3 and 10), on approximately 2.06 acres of property. remaining buildings on site are currently involved in an ECRA clean up being addressed by GAF. Historically, site was owned by Ruberoid Corporation In 1967, manufactured asbestos piping and shingles. Ruberoid merged with GAF. During 1981 until 1983, VVS operated at the site producing plastic siding for homes and other buildings. The raw material (PVC resin, stabilizers, plasticizers and pigments were delivered by truck or rail car to the facility and the resin was stored in silos and mixed with stabilizers or pigments, then extruded in one of six process operations. Recent analysis confirms the presence of asbestos containing material and due to the history of the site, heavy coatings of dust is suspected to contain asbestos.

2. Description of Threat

On March 11, 1992, the New Jersey Department of Environmental Protection and Energy (NJDEPE) requested EPA-Region II, Removal Action Branch perform a CERCLA removal action at the VVS site. A preliminary assessment and removal evaluation were conducted in April 1992. According to the owners consultant, an inventory of the following materials exist: 50-70 varying sized containers containing oils, pigments, organotin stabilizers, asbestos, PVC resin and some unknowns and 60 to 70 boxes of powders. Threat of fire in the area of the PVC resin is present which would result in release of hydrochloric acid and vinyl chloride vapors to the nearby residential community.

C. Preliminary Assessment Results

During this assessment two buildings were investigated. This assessment revealed approximately 50-70 containers of varying size within and outside of the building, containing oils, pigments, organotin stabilizers, asbestos, PVC resins and some unknowns. Additionally, 60-70 boxes of powders (possibly PVC resins) and 35 bags of unknown powder are contained within the buildings at the VVS site.

Samples were collected for hazard categorization which supported the material being PVC resin. Soil samples were analyzed for asbestos and 2-3% chrysotile asbestos was confirmed. Additionally, drum and powder samples revealed elevated levels of tetrachloroethylene, toluene and xylene.

Additional information was gained from the local Emergency Medical Coordinator: 4 transformers, 3 silos, and possible buried drums and asbestos.

IV. Response Information

A. Planned Removal Actions

The VVS removal action will consist of removal of the CERCLA Hazardous Substances and PVC material inside and outside the facility. The asbestos material inside the structure posing significant hazard to ERCS will be containerized/stabilized and stored on site.

B. Situation

1. Current Situation

The Action Memorandum was approved on September 28, 1992 to address the drums and raw materials at the site.

2. Removal Actions to Date

On December 10, ERCS and EPA conducted a site visit and discuss removal activities. EPA also met with the local authorities to notify them of the Removal Action.

EPA, TAT and ERCS mobilized to the VVS site on December 14, 1992 to begin removal activities. To date, part of the fencing around the site has been secured and padlocks have been placed on external doors to secure the building. A storage trailer and Kubota Tractor was mobilized on December 14, in addition to a mobile trailer temporarily utilized as a command post. Site security was began December 14 at the COB.

Crushed stones were delivered and spread around the storage trailer after it was stabilized to prevent migration of possible soil contaminants.

ERCS has submitted a draft Health and Safety Plan, Sampling Plan and Work Plan. All of the above need revisions before site work can commence.

On December 16, 3 asbestos surveyors visited the site to bid on the survey of the suspect asbestos; sampling and analysis.

3. Enforcement

VVS didn't respond to Notices of Violation issued by NJDEPE on November 5, 1986 and August 8, 1991. The mortgage holding company, ITT Diversified Credit Corporation refuses to foreclose on the property as it would trigger an ECRA. According to the NJDEPE, ITT views the mortgage as uncollectible and has distanced itself from all cleanup responsibilities. Federal enforcement actions have been initiated with a informal PRP search. As information becomes available, formal enforcement activities will commence.

C. Next Steps

- 1. ERCS will continue site preparation. Bids for the Asbestos survey should be received by the end of the week so next week the survey can be completed. The asbestos survey should be completed by December 29, 1992.
- 2. ERCS will revise the Safety, Sampling and Work plans until they are acceptable. Once the asbestos survey is completed, an asbestos abatement sub contractor will be secured to remove the asbestos so the intended removal action can commence.
- 3. EPA/TAT will write the Community Relations Plan and the Administrative Record for placement in the local library.

V. Cost Information

Costs will be reported in the next Pollution Report.

RECEIVED

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U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

I. Heading

Date:

December 23, 1992

From:

Gad W. Tawadros, OSC, Removal Action Branch

To:

C. Sidamon-Eristoff, EPA-RA

W. Muszynski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A J. Marshall, 2EPD

J. McVeigh, 2ORC-NJSUP
R. Gherardi, OPM-FIN
M. Mjoness, OS-210
D. Mellott, EPA
J. McVeith, EPA
D. Schwenk, EPA
J. Frisco, EPA

L. Miller, NJDEPE
K. Kloo, NJDEPE
D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City-OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP: POLREP 2

II. Background

Site No. 9E

Delivery Order No. 0027-02-019
Response Authority CERCLA
ERNS No. N/A
NPL Status Non-NPL

State Notification NJDEPE Notified

Action Memorandum Status Approved September 28, 1992

Start Date December 10, 1992

Demobilization Date: N/A Completion Date: N/A

III. Site Information

A. Incident Category

PARCHMENT _ RS _

id Howity

3. Enforcement

Federal enforcement actions have been initiated with a informal PRP search. As information becomes available, formal enforcement activities will commence.

C. Next Steps

- 1. ERCS will continue site preparation. Bids for the asbestos abatement will be secured after specifications for the scope of work are completed. Once the asbestos survey is completed, an asbestos abatement sub contractor will be secured to remove the asbestos so the intended removal action can commence.
- 2. ERCS will make amendments to the Safety Plan to finalize the site copy.
- 3. EPA/TAT will write the Community Relations Plan and the Administrative Record for placement in the local repository.

V. Cost Information

Cost To Date

| Cleanup Contractor | \$24,300 |
|------------------------------------|----------|
| TAT | 4,000 |
| CLP Analytical Services | - N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAGs | N/A |
| Intramural (HQ, Regions, ERT) | 3,500 |
| Letter Contracts | N/A |
| TOTAL \$ | 31,800 |
| Project Ceiling \$ | 800,000 |
| Percent of Project Funds Remaining | 96.0 % |

U.S. ENVIRONMENTAL PROTECTION AGENCY

POLLUTION REPORT

I. Heading

Date:

December 30, 1992

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

C. Sidamon-Eristoff, EPA-RA

W. Muszynski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A J. Marshall, 2EPD

20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjoness, OS-210 D. Mellott, EPA J. McVeith, EPA D. Schwenk, EPA J. Frisco, EPA L. Miller, NJDEPE K. Kloo, NJDEPE JD. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City-OEM

TAT

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP:

POLREP 3

II. Background

Site No.

9E

Delivery Order No. Response Authority 0027-02-019 CERCLA

ERNS No. NPL Status N/A Non-NPL

State Notification

NJDEPE Notified

Action Memorandum Status

Approved September 28, 1992

Start Date

December 10, 1992

Demobilization Date:

N/A

Completion Date:

N/A

site.

ERCS submitted the Health and Safety plan, sampling plan and proposed work plan. All plans have been reviewed by EPA and TAT and approved by the OSC.

EPA/TAT reviewed the Health and Safety Plan and conducted air monitoring during site activities.

3. Enforcement

Federal enforcement actions have been initiated with a informal PRP search. As information becomes available, formal enforcement activities will commence. On December 30, 1992, GAF responded to the 104E letter requesting additional time to respond.

C. Next Steps

- 1. Bids for the asbestos abatement will be secured after specifications for the scope of work are completed. Once the asbestos survey is completed, an asbestos abatement sub contractor will be secured to remove the asbestos so the intended removal action can commence.
- 2. The Community Relations Plan and the Administrative Record is in progress.

V. Cost Information

Cost To Date

| Cleanup Contractor TAT | \$33,200 5,700 |
|---|-------------------------|
| CLP Analytical Services REAC | N/A N/A |
| Regional Laboratory Services IAGs | N/A N/A |
| Intramural (HQ, Regions, ERT) Letter Contracts | 5,000 N/A |
| TOTAL | \$ 43,900 |
| Project Ceiling Percent of Project Funds Remaining | \$ 800,000 94.5 % |

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

January 7, 1993

From:

Gad Tawadros, OSC, U.S.EPA, Region II

Removal Action Branch

To:

C. Sidamon-Eristoff, EPA-RA

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB

M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA

J. McVeith, EPA
D. Schwenk, EPA
J. Frisco, EPA
L. Miller, NJDEPE

K. Kloo, NJDEPE

VD. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO: Four (4)

II. Background

Site No.:

Delivery Order No.: 0027-02-019

Response Authority: CERCLA ERNS No.: N/A NPL Status: Non-NPL

State Notification: NJDEPE Notified

Action Memorandum: Approved September 28, 1992

9 E

Start Date: November 30, 1992

Demobilization Date: N/A Completion Date: N/A

On December 30, GAF contacted EPA to request additional time to respond to the 104E letter. On January 6, TAT conducted a thorough inventory of the material in the building. Information regarding potentially responsible parties were documented and will be forwarded to the EPA attorney assigned to the site.

Enforcement

Federal enforcement actions have been initiated with an informal PRP search. As information becomes available, formal enforcement activities will commence. On December 30, 1992, GAF responded to the 104E letter requesting additional time to respond.

C. Next Steps

- 1. ERCS will sample the 4 transformers and investigate (and sample) the 12,000 gallon tank in the courtyard. Additionally, ERCS will sample the silos utilizing the highlift while it is available for the asbestos survey and walk through.
- 2. Bids for the asbestos abatement will be secured after specifications for the scope of work are completed. Once the asbestos survey is completed, an asbestos abatement sub contractor will be secured to remove the asbestos so the intended removal action can commence.
- 3. The Community Relations Plan and the Administrative Record are in progress.

V. Estimated Cost Information

| Clean-up Contractor | <u>Cost to Date</u> |
|------------------------------------|---------------------|
| TAT | 58,592 |
| CLP Analytical Services | 10,351 |
| KEAC | N/A |
| Regional Laboratory Services | N/A |
| | N/A |
| Intramural (HQ, Regions, ERT) | N/A |
| Letter Contracts Regions, ERT) | 7,500 |
| Mo To | N/A |
| TOTAL | |
| Project Ceiling | \$ 76,443 |
| Percent of Project Funds Remaining | \$800,000 |
| Jaco Funds Remaining | 91 |

III. Site Information

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Site Background
 Refer to POLREP No. 1
- 2. Description of the Threat Refer to POLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation As before
- 2. Removal Actions to Date

OSC, TAT and ERCS met with BCM to discuss the results of the survey and additional sampling necessary to confirm the presence or absence of asbestos in areas inaccessible during the initial survey. On January 5 and 6, BCM continued the survey utilizing a highlift rented through ERCS and an extension ladder. Forty seven additional bulk samples were taken to confirm the presence or absence of asbestos containing material (ACM) in various materials since a minimum of 3 samples/homogeneous area are required to determine if the material is considered ACM. Two additional air samples were run to confirm the high levels of asbestos reported in the TEM analysis since BCM suspected pump failure during the initial air sampling. The air samples will be analyzed by BCM to expedite the turn around time.

BCM utilized the high lift to samples in Building 10 and an extension ladder in building 3. ERCS supported BCM during the additional survey. The final report should be submitted on January 7, with the Scope of Work submitted on January 8.

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EJAN 28 1993

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

January 14, 1993

inple

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

C. Sidamon-Eristoff, EPA-RA

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP R. Gherardi, OPM-FIN

R. Gherardi, OPMM. Mjones, OS-210
D. Mellot, EPA
J. McVeith, EPA
D. Schwenk, EPA
J. Frisco, EPA
L. Miller, NJDEPE
K. Kloo, NJDEPE
\(\sqrt{D}\). Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO: Five (5)

II. Background

Site No.: 9E

Delivery Order No.: 0027-02-019

Response Authority: CERCLA ERNS No.: N/A NPL Status: Non-NPL

State Notification: NJDEPE Notified

Action Memorandum: Approved September 28, 1992

Start Date: November 30, 1992

Demobilization Date: N/A Completion Date: N/A

III. Site Information

A. Incident Category

CERCLA incident category: Inactive Production Facility

- B. Site Description
- 1. Site Background

Refer to POLREP No. 1

Description of the Threat

Refer to POLREP No. 1

3. Preliminary Assessment Results

Refer to POLREP No. 1

IV. Response Information

A. Planned Removal Action

Refer to POLREP No. 1

- B. Situation
- 1. Current Situation

ERCS awaiting for the sealed bids from asbestos abatement companies. The sealed envelopes will be opened on Friday January 15, 1993, at 2:00 PM on site. The successfull bidder will begin mobilie and begin the asbestos removal on January 18, 1993.

2. Removal Actions to Date

During this period all open drums as well as all open boxes inside and outside of the buildings, and the silos have been sampled for hazcatting. A total of about 95 samples were obtained.

TAT, ERCS, BCM and the OSC held a meeting to discuss operational aspects related to the asbestos abatement project and results from the last survey. According to the survey, building 10 has approximately 1050 LF of asbestos insulated pipe, of which 50% to 75% requires repair or removal, and 80% of building 3's 1875 LF of asbestos insulated pipe will also repair or removal. The abatement contractor will repair or remove the ACM, but will not cut the pipe. Additionally, the drums of hazardous materials

will be HEPA vacuumed, wet wiped, covered with plastic and left in place for subsequent handling by ERCS. The boxes of vinyl siding, PVC resin, and pigments will be packed for disposal as asbetos contaminated waste. The PVC resin and the pigments will then be analyzed for hazardous characteristics. If the materials show characteristics they will dispose of in a RCRA approved landfill; if not, the abatement contractor will do so in an asbestos approved landfill.

On Tuesday January 11, 1993, bidders for the asbestos abatement contract conducted a site walkthrough inspection. Prior to this they were briefed on project specifics. Additionally, the decontamination facilities were inspected by the bidders and found to be acceptable for their use.

3. Enforcement

Federal enforcement actions have been initiated with an informal PRP search. As information becomes available, formal enforcement activities will commence. GAF responded in writing to the 104E letter requesting additional time. Additional time was granted for the second time.

C. Next Steps

- Asbestos abatement will commence on January 18, 1993. so the intended removal action can be initiated.
- 2. The Community Relations Plan and the Administrative Record are in progress.

V. Estinated Cost Information

| | Cost to Date |
|------------------------------------|--------------|
| Clean-up Contractor | 58,592 |
| TAT | 13,600 |
| CLP Analytical Services | N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAG's | N/A |
| Intramural (HQ, Regions, ERT) | 9,600 |
| Letter Contracts | N/A |
| TOTAL | \$ 81,792 |
| Project Ceiling | \$800,000 |
| Percent of Project Funds Remaining | 89% |

James Committee State

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

· I. Heading RECEIVED

Date:

January 21, 1993

MAN 28 1993

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA J. Prisco, EPA

L. Miller, NJDEPE K. Kloo, NJDEPE √D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

Subject:

Vanquard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County, New Jersey

POLREP NO:

S1x (6)

II. Background

Site No.:

9E

Delivery Order No .:

0027-02-019

Response Authority: ERNS No.:

CERCLA N/A

NPL Status:

Non-NPL

State Notification:

Action Memorandum:

NJDEPE Notified

Start Date:

Approved September 28, 1992

November 30, 1992

Demobilization Date: Completion Date:

N/A N/A

P.2/4

III. Site Information

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Site Background
 Refer to POLREP No. 1
- Description of the Threat
 Refer to POLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- Current Situation

2. Removal Actions to Date

On Friday January 15, 1993, ERCS received the sealed bids for the asbestos abatement subcontract. ERCS retained MARCOR as the subcontractor for the asbestos abatement. MARCOR was the lowest bidder, thus rewarded the contract. The OSC reviewed MARCOR's statement of qualifications and appears to be adequate and qualified to do the job.

On Monday January 18, 1993, MARCOR mobilized the HEPA vacuum and some other equipment on site in preparation for the upcoming removal activities.

A meeting was held with BCM to discuss removal activities and provide ERCS with a State Construction Permit Notes to initiate the abatement activities. Meanwhile BCM conducted the baseline air monitoring.

The New Jersey State Office of Asbestos Control and Licensing, Department of Labor met with the OSC, TAT, ERCS and MARCOR. During this meeting MARCOR stated that about 50% of his asbestos tecnnicians have asbestos license of different state and their New Jersey license are either expired and/or waiting to be issued. MARCOR's project manager stated he can continue with only the NJ licensed personnel and this will double the time of clean-up activities. The State inspector stated that due to the fact that this is a Superfund site the OSC has the authority to waive this requirement. A decision was made by the OSC on the spot to waive this requirement in order to complete clean-up activities within the timeframe target.

Asbestos abatement started on Wednesday 20, 1993. The OSC appointed an area in building number 10 for temporary storage of the ACM. This area was chosen due its accessibility for loading and unloading, security and weatherproof.

EPA/TAT continued hazcatting the samples collected during the past week. Additionally, samples collected from the transformers were shipped to EMSL laboratories for PCB confirmatory analysis.

ORC received a written request from GAF requesting additional time to answer the 104 E letter. Request has been granted. ORC unable to reach Vanguard Vinyl Siding owners to

OSC and TAT notified and bricfed nearby neighbors, local Fire Department and the city Hazmat team of the on-going aspestos abatement activities. 3.

Enforcement

GAF responded in writing to the 104E letter requesting additional time. Additional time was granted for the second

C. Next Steps

- The intended removal action will continue as soon as 1. the asbestos abatement is completed. 2.
- The Community Relations Plan and the Administrative Record are in progress.

V. Estimated Cost Information

| | Cost to Date |
|--|--|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 261,000 |
| TAT CLP Analytical Services REAC Regional Laboratory Services IAG's Intramural (HQ, Regions, ERT) Letter Contracts | 16,000 N/A N/A N/A 11,800 N/A |
| TOTAL | \$288,800 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 63% |

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P.2/5

RECEIVED 1FEB 3 1993

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

January 28, 1993

From:

Gad W. Tawadros, OSC

Removal Action Branch

To:

W. Muszinski, EPA DRA

K. Callahan, ERRD-D

R. Salkie, ERR-DDNJP

G. Zachos, ERR-RAB

M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP R. Gherardi, OPM-FIN

M. Miones, OS-210

D. Mellot, EPA

J. McVeith, EPA

D. Schwenk, EPA

J. Frisco, EPA

L. Miller, NJDEPE

K. Kloo, NJDEPE

√D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Seven (7)

II. Background

Site No.:

9E

0027-02-019

Delivery Order No.: Response Authority:

CERCLA

ERNS No.:

N/A

NPL Status:

Non-NPL

State Notification:

NJDEPE Notified

Action Memorandum:

Approved September 28, 1992 November 30, 1992

Start Date:

N/A

Demobilization Date:

Completion Date:

N/A

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III. Site Information

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Site Background
 Refer to POLREP No. 1
- 2. Description of the Threat Refer to POLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor continues asbestos mitigation in order for Guardian to remove and dispose of all CERCLA Hazardous substances.

2. Removal Actions to Date

MARCOR asbestos abatement contractor continues to remove damaged, deteriorated, unwrapped pipe insulation and seal or cap ends with undamaged and/or intact wrapping. To date, approximately 350 LF of asbestos pipe insulation has been removed by glovebagging techniques. Bulk dust/powder material in building 10 has been collected and sealed in fiber drums. A high efficiency particulate asbestos (HEPA) vacuum is being used by the ERCS subcontractor to collect asbestos fibers and clean all debris from the horizontal surfaces in the north section of building 10.

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JAN 16 187 08:31 P.4/5

A waste decon area was set up along the SE loading dock of building 10 to allow for future disposal. All vinyl siding product boxes were relocated from building 10 to building 3. The subcontractor has chosen to remove all the vinyl siding from the box and wet wipe the siding to dispose as construction debris while bagging the boxes for disposal as asbestes contaminated debris.

BCM conducts daily air monitoring of various areas inside and around the site to determine the airborne fiber content, in addition to personal air monitoring conducted by MARCOR. EPA/TAT continues air monitoring with HNU and/or OVA.

A sample from the storage tank between buildings 3 and 10 was sent out for analysis to determine if it is asbestos. Meanwhile, ERCS will determine the integrity of the storage tank.

EPA is awaiting results of the oil and raw material analytical to determine the action on the boxes of PVC raw material and transformer oil. Verbal results of the PVC material does not show any hazardous constituents of concern.

The Community Relations Plan was submitted to the Office of External Programs (ORC).

3. Enforcement

Same as Polrep #6.

- C. Next Steps
- 1. The intended removal action will continue as soon as the asbestos abatement is completed in building 10. When MARCOR completes the asbestos abatement in building 10, ERCS will go in and address the drums while MARCOR works on building 3.
- 2. The Administrative Record is in progress.

V. Estimated Cost Information

| | Cost to Date |
|---|---------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 269,000 |
| TAT CLP Analytical Services | 18,500 N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAG's | N/A |
| Intramural (HQ, Regions, ERT) | 14,400 |
| Letter Contracts | N/A |
| TOTAL | \$301,900 |
| Project Ceiling | \$800,000 |
| Percent of Project Funds Remaining | 62% |

12

THU CL m. 1/4

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

From:

February 4, 1993

W.J. []

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP R. Gherardi, OPM-FIN

M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA

J. Frisco, EPA L. Miller, NJDEPE K. Kloo, NJDEPE ✓D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM TAT

Subject:

. . . .

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County, New Jersey

and the control of th

POLREP NO:

Eight (8)

II. Background

Site No.:

9E

Delivery Order No.:

0027-02-019

Response Authority: ERNS No.:

CERCLA N/A

NPL Status: State Notification: Non-NPL

Action Memorandum:

NJDEPE Notified

Start Date:

Completion Date:

Approved September 28, 1992

Demobilization Date:

November 30, 1992 N/A

N/A

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III. Site Information

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Site Background
 Refer to POLREP No. 1
- Description of the Threat
 Refer to POLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

BRCS' asbestos abatement subcontractor continues asbestos mitigation in order for Guardian to remove and dispose of all CERCLA Hazardous substances.

2. Removal Actions to Date

MARCOR asbestos abatement contractor continues to remove damaged, deteriorated, unwrapped pipe insulation and seal or cap ends with undamaged and/or intact wrapping. To date, approximately 630 LF of asbestos pipe insulation has been removed from building 10. Building 10 is almost complete albeit power washing the wall and encapsulating the piping. MARCOR began cleaning out the rooms in building 3 and restage the pallet boxes of raw material from building 10 to building 3 while they clean building 10. The crew is scheduled to work on Saturday to make up for time lost on Tuesday due to the sub-zero temperatures.

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BCM continues to conduct daily air monitoring of various areas inside and around the site to determine the airborne fiber content, in addition to personal air monitoring conducted by MARCOR. Air samples taken around the site have been low in comparison to the CO requirements. In addition, EPA/TAT continues air monitoring with HNU and/or OVA.

The sample from the storage tank in the courtyard between buildings 3 and 10 came back positive for asbestos. The tank was inspected and there is no threat to ERCS during the clean up, therefore the tank will not be addressed under this Action Memo with the exception of ERCS securing the area.

Results from the transformer samples were received and 3 of the 4 transformer oils were below the 50 ppm regulatory limit while the large outside transformer had 150 ppm PCBs. Additionally, the TCLP analysis was returned on the 4 composite samples of the boxed raw materials and none of the results exceed TCLP regulatory limits.

EPA/TAT arranged a meeting with Wheaton Plastics Recycling facility to discuss recycling of both the finished and raw vinyl siding material. On February 3, EPA and TAT toured the facility and spoke with the manager about potential arrangements tor recycling the vinyl materials from the eite.

On February 2, EPA and TAT met with Bob Saunders (Cloucester City OEM) to discuss the removal and to obtain a potential outlet for recycling the material on site. During the meeting, concern over the status of the site upon EPAs departure was brought up, with regard to the cities understanding that the site would be totally clean. Due to the conflict in the Action Memo and what the city was told, interest was expressed to conduct a meeting with local and federal official to resolve the discrepancy prior to the demobilization of ERCS and their subcontractor.

3. Enforcement

The ORC has contacted potential property owners to have an Access Agreement signed to allow for the disposal of the finished product and raw material. They continue to search for the property owner.

- C. Next Steps
- 1. The intended removal action will continue as soon as the asbestos abatement is completed in building 10. When MARCOR completes the asbestos abatement in building 10, ERCS will go in and address the drums while MARCOR works on building 3.
- The Administrative Record is in progress.

JAN 27 '87 07:18

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Cost to Date

 Recycling efforts will continue as the Access Agreement is reached.

| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 278,800 |
|--|--|
| TAT CLP Analytical Services REAC Regional Laboratory Services IAG's Intramural (HQ, Regions, ERT) Letter Contracts | 21,150 N/A N/A N/A 16,000 N/A |
| TOTAL | \$315,950 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 60.5% |

FEB.1 8.1995

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

February 11, 1993

4.50

From:

Gad W. Tawadres, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, ZEPD 20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA

D. Schwenk, EPA of the property of the control of t

J. Frisco, EPA

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K. Kloo, NJDEPE √ D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Nine (9)

II. Background

Site No.:

9E

Delivery Order No.:

0027-02-019

Response Authority: ERNS No.:

CERCLA

NPL Status:

N/A

Non-NPL

State Notification:

NJDEPE Notified

Action Memorandum:

Approved September 28, 1992

Start Date:

November 30, 1992

Demobilization Date:

N/A

Completion Date:

N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Ti. Site Background

 Reter to POLREP No. 1
- Description of the Threat
 Refer to PCLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- R. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor continues asbestos mitigation in order for Guardian to remove and dispose of all CERCLA Hazardous substances. Building #10 should be available next week for ERCS to begin addressing the drums.

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2. Removal Actions to Date

MARCOR asbestos abatement contractor continues to remove damaged, deteriorated, unwrapped pipe insulation and seal or cap ends with undamaged and/or intact wrapping. To date, approximately 630 LF of asbestos pipe insulation has been removed from building #10. Building #10 should be completed Friday, then BCM will conduct the clearance TEM air sampling. MARCOR will clear the section N of the loading dock and include it with building #10 so that they can continue to address the vinyl siding by wiping It down then storing it in a clean area. The TEM air sample will be analyzed with 24 hour turn around time. If the result is below the 0.01 fibers/cc, ERCS will begin addressing the drums in building #10, as described in the Action Memo. MARCOR will then concentrate clean up efforts in building #3. To date, 1300 LF cf pipe insulation has been removed

from building #3. An additional 150 LF of insulation will be removed once the vinyl siding finished product is addressed.

Run off water from the power washing of the walls and floor of building #10 have been containerized and filtered. The material is brown in color after 5 micron filtering and disposal options are being investigated. Approximately 600 gallons of water have been generated. ERCS is obtaining quotes for analysis required by Camden County Municipal Utilities Authority for discharge into the sewer if the material is below the regulatory limit.

BCM continues to conduct daily air monitoring of various areas inside and around the site to determine the airborne fiber content, in addition to personal air monitoring conducted by MARCOR. Air sample taken around the site have been low in comparison to the CO requirements. EPA/TAT continues air monitoring with HNU and/or OVA.

Wheaton Plastic Recycling Co. facility, who initially expressed an interest in the material has not responded to recent contact. EPA/TAT continued to contact recycling facilities.

A National Significant Action Memo to mitigate the asbestos inside the 10,000 gallon tank and dispose of all stored asbestos material onsite is on hold at this time.

The ORC contacted the President of Vanguard Vinyl and faxed an Access Agreement on February 8, requesting his signature and return by February 11, so that the materials can be removed from the site. If ORC receives no reply, another consent agreement will be issued on February 12 with response required by February 16. If they still receive no reply, an order will be issued, signed by the RA.

- C. Next Steps
- 1. The intended removal action will begin in building 10 next week if the TEM results reveal a maximum fiber level of 0.01 f/cc in the air test and BCM gives the Certificate of Occupancy. MARCOR will continue the asbestos removal in building #3.
- 2. The Administrative Record has been completed and will be submitted to the repository.
- 3. Recycling efforts will continue as the Access Agreement is reached.

| Estimated Cost Information | Cost to Date |
|---|----------------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 291,150 |
| TAT CLP Analytical Services REAC | 22,500 N/A N/A |
| Regional Laboratory Services IAG's | N/A N/A |
| Intramural (HQ, Regions, ERT) Letter Contracts | 18,000 N/A |
| TOTAL | \$331,650 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 58.5% |

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U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

February 18, 1993

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From:

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA

J. Frisco, EPA L. Miller, NJDEPE K. Kloo, NJDEPE

-D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Ten (10)

II. Background

Site No.:

9E

Delivery Order No .:

0027-02-019

Response Authority:

CERCLA N/A

ERNE No.: NPL Status:

Non-NPL

State Notification:

NJDEPE Notified

Action Memorandum:

Approved September 28, 1992

Start Date:

November 30, 1992

Demobilization Date:

N/A

Completion Date:

N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- 1. Site Background

 Refer to POLREP No. 1
- 2. Description of the Threat Refer to POLREP No. 1
- 3. Preliminary Assessment Results Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor completed building #10 on February 11, and the building was handed over to ERCS on February 12 with the Certificate of Occupancy. ERCS subcontractor continues asbestos mitigation in building #3 in order for Guardian to remove and dispose of all CERCLA Hazardous substances.

2. Removal Actions to Date

MARCOR asbestos abatement contractor completed building #10 The clearance air sampling was taken and results of the TEM samples were received on February 12. The analysis showed 0.0053 and <0.0051 f/cc (below the regulatory standards for PCM analysis of 0.01 fibers/cc), and the Certificate of Occupancy was issued. Since TEM samples were taken at the asbestos survey, the clearance testing was analyzed with the same method. TEM distinguishes between asbestos fibers and other fibers whereas PCM only yields a total liber count.

MARCOR continued the clean up in building #3 and the finished vinyl siding is being washed and staged in building #10 as directed by the OSC until an access agreement is reached by the ORC. An additional 150 LF of insulation will be removed from building #3 after the removal of the vinyl siding finished product is completed.

ERCS continues to stage cleaned boxes full with PVC materials in building #10 as well as drums from building #3. Drums in poor condition were overpacked and/or transferred to a reconditioned drum. TAT and ERCS labeled, sampled and transferred material from bags that were contaminated into 25 drums to be relocated from building #3 to building #10.

Run-off water from the power washing of the walls, ceiling and floor was sampled and sent out to a lab for analysis. MARCOR will filter the water to 5 micron particulate filter. Pending results whether hazardous or non-hazardous materials.

BCM continues to conduct daily air monitoring of various areas inside and around the site to determine the airborne fiber content, in addition to personal air monitoring conducted by MARCOR. EPA/TAT continues air monitoring with HNU and/or OVA.

The Administrative Record was deposited in the local repository.

The National Significant Action Memo- to mitigate the asbestos inside the 10,000 gallon tank and dispose of all stored asbestos material ensite is on hold.

On February 15, Gloucester City Mayor Walter Jost and the City Emergency Management Coordinator met with the OSC and toured building #10. They would like to set up a meeting with local, state and federal officials to discuss the asbestos materials remaining on site and the future of the site after EFA's departure.

3. Enforcement

The President of Vanguard Vinyl responded to the ORC consent that he was not authorized to allow access. An order that will be signed by the Regional Administrator is currently in progress.

C. Next Steps

1. The intended removal action will continue in building 10 next week. MARCOR will continue the asbestos removal in building #3.

2. Recycling efforts will continue as the Access Agreement is reached.

| | Cost to Date |
|---|--------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 303,250 |
| TAT | 28,000 |
| CLP Analytical Services | N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAG's | N/A |
| Intramural (HQ, Regions, ERT) | 20,000 |
| Letter Contracts | N/A |
| TOTAL . | \$351,250 |
| Project Ceiling | \$800,000 |
| Percent of Project Funds Remaining | 56.1% |

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

March, 3, 1993

5-110

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAE-A

J. Marshall, 2EPD 20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA J. Frisco, EPA L. Miller, NJDEPE

K. Kloo, NJDEPE JD. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Twelve (12)

II. Background

Site No.:

ĢΞ

Delivery Order No.:

0027-02-019

Response Authority: ERNS No.:

CERCLA N/A

NPL Status:

Non-NPL

State Notification:

NJDEPE Notified Approved September 28, 1992

Action Memorandum: Start Date:

November 30, 1992

Demobilization Date:

N/A

Completion Date:

N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- 1. Site Background
 Refer to POLREP No. 1
- 2. Description of the Threat Refer to POLREF No. 1
- 3. Preliminary Assessment Results Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor continues asbestos mitigation in building #3 in order for Guardian to remove and dispose of all CERCLA Hazardous substances. ERCS began to address the hazardous materials in building #10. TAT initiated a bulking scheme for the wastestreams.

2. Removal Actions to Date

MARCOR continued the asbestos clean up in building #1. Additional 110 cy of empty boxes of the vinyl siding and debris was shipped to Ham Sanitary Landfill in Peterstown WV bringing the total to 220 cy. The three silos were emptied and materials staged in building #10. The tank of asbestos in the courtyard between buildings #10 and #3 has been secured.

All materials have been sampled and hazcatting is 95% completed to identify the material. Six preliminary compatibility groups have been identified. Additional testing will be done prior to compositing samples to reduce the number of samples sent out for analysis. Analytical for the 3 solid compatibility groups have been put on hold awaiting results of the consent order and potential

recycling of this material.

On February 26, EPA and TAT conducted a site visit of Ear Industries, a potential PVC recycler. Another potential PVC recycler, Memphis Plastic Pipe Co. stopped by the site and expressed an interest in the material. The OSC and TAT inspected the PVC pipe manufacturing facility.

The decon wash water analysis results were received on February 24 and COD as well as sulfide exceed the CCMUA limits. On site pre-treatment is being investigated to allow the water to be disposed of at CCMUA. Additionally, wastewater treatment pricing is being obtained.

3. Enforcement

A consent order that will be signed by the Regional Administrator is currently in progress. Disposal/recycling of the PVC material will be addressed once the order is issued.

C. Next Steps

- 1. Samples of the liquid wastes will be sent out for disposal analysis. The solid wastestream will be addressed once the recycling of PVC material is completed. MARCOR should be completed with the asbestos removal in building #3 by the end of the week.
- 2. Recycling efforts will continue as the Access Agreement is reached.

| | Cost to Date |
|---|--------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 328,602 |
| TAT | 35,000 |
| CLP Analytical Services | N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAG's | N/A |
| Intramural (HQ, Regions, ERT) | 24,000 |
| Letter Contracts | N/A |
| TOTAL | \$388,602 |
| Project Ceiling | £800,000 |
| Percent of Project Funds Remaining | 51. 4% |

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

February 25, 1993

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA J. Frisco, EPA L. Miller, NJDEPE K. Kloo, NJDEPE

√ D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Eleven (11)

II. Background

Site No.:

9E

Delivery Order No.:

0027-02-019

Response Authority: ERNS No.:

CERCLA N/A

NPL Status:

Non-NPL

State Notification:

Action Memorandum:

NJDEPE Notified

Start Date:

Approved September 28, 1992 November 30, 1992

Demobilization Date:

N/A

Completion Date:

N/A

2.

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- Site Background
 Refer to POLREP No. 1

Refer to POLREP No. 1

3. Preliminary Assessment Results
Refer to POLREP No. 1

Description of the Threat

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor continues asbestos mitigation in building #3 in order for Guardian to remove and dispose of all CERCLA Hazardous substances. ERCS began to address the hazardous materials in building #10. All hazardous materials have been transferred to building #10 for ERCS to address.

2. Removal Actions to Date

Asbestos stabilization activities continue in building #3. All drums and containers of hazardous materials have been staged in building #10. Hazcatting operations are ongoing to identify these materials. Approximately 110 cy of debris were removed from the site to reduce the fire load of the buildings.

The decon water generated during the power washing operation in building #10 was analyzed and requires pre-treatment prior to discharge into the Camden County Municipal Wastewater Utility.

Recycle options are being pursued for materials abandoned on site. ORC has drafted an order to the past president of Vanguard Vinyl which will be issued following the RA's

signature. ORC requested the OSC not to recycle any materials until the order is issued.

Bar Industries expressed an interest in the materials. The OSC scheduled a site visit on February 26 to inspect the facility.

On February 22, a representative from TRC was on site to conduct the PRP search. Approximately 72 documents were copied from documents in the building.

BCM continues to conduct daily air monitoring of various areas inside and around the site to determine the airborne fiber content, in addition to personal air monitoring conducted by MARCOR. EPA/TAT continues air monitoring with HNU and/or OVA.

3. Enforcement

The President of Vanguard Vinyl responded to the ORC consent that he was not authorized to allow access. An order that will be signed by the Regional Administrator is currently in progress.

C. Next Steps

- 1. ERCS will continue to address the hazardous materials. MARCOR should be completed with the asbestos removal in building #3 next week.
- 2. Recycling efforts will continue as the Access Agreement is reached.

| | Cost to Date | | |
|---|--------------|--|--|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 314,925 | | |
| TAT | 30,000 | | |
| CLP Analytical Services | N/A | | |
| REAC | N/A | | |
| Regional Laboratory Services | N/A | | |
| IAG's | N/A | | |
| Intramural (HQ, Regions, ERT) | 22,000 | | |
| Letter Contracts | N/A | | |
| TOTAL | \$364,925 | | |
| Project Ceiling | \$800,000 | | |
| Percent of Project Funds Remaining | 54. 4% | | |

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date: Ma

March 10, 1993

W-5-16

From:

Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAE

M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA

D. Schwenk, EPA
J. Frisco, EPA

L. Miller, NJDEPE
K. Kloo, NJDEPE
VD. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO: Thirteen (13)

II. Background

Site No.: 9E

Delivery Order No.: 0027-02-019

Response Authority: CERCLA ERNS No.: N/A NPL Status: Non-NPL

State Notification: NJDEPE Notified

Action Memorandum: Approved September 28, 1992

Start Date: November 30, 1992

Demobilization Date: N/A Completion Date: N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- 1. Site Background
 Refer to POLREP No. 1
- 2. Description of the Threat Refer to FOLREF No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- 1. Current Situation

ERCS' asbestos abatement subcontractor completed the asbestos clean up in both buildings #10 and #3. The CO for building #3 was issued on March 5, 1993. EPA/TAT bulked liquid samples for disposal analysis. The site will be temporarily demobilized awaiting results.

Removal Actions to Date

MARCOR completed the asbestos clean up applications and approximately 2100 LF of badly damaged pipe insulation was removed from building #3 and building #10. A Certificate of Occupancy was issued for building #3 on March 5, 1993. Approximately 330 cy of empty boxes of the vinyl siding and debris was shipped to Ham Sanitary Landfill for disposal. On March 9, the 500 gallon PCB transformer was pumped and flushed. The 12 drums generated from the cleaning were temporarily staged on site. There are 132 drums of hazardous material, PCB oils, decon water and empty drums. Additionally, there are 73 labpacks of paints, pigments and other small containers. The total PVC raw material on site is approximately 100 cubic yards, in addition to approximately 150 cubic yards of finished vinyl siding.

After hazcatting all the samples on site, the six original liquid composite groups were reduced to four liquid composite samples to be shipped for disposal analysis.

The decon wash water analysis results exceeded the CCMUA limits. Composite samples will be sent to the lowest bid for wastewater treatment.

3. Enforcement

A consent order that will be signed by the Regional Administrator is currently in progress. Disposal/recycling of the FVC material will be addressed once the order is issued.

- C. Next Steps
- Samples of the hazardous liquid wastes will be sent out for disposal analysis.
- Recycling efforts will continue when the order is issued, and the remaining solid wastestreams will be addressed then.

| | Cost to Date |
|---|-----------------------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 337,386 |
| TAT CLP Analytical Services REAC Regional Laboratory Services | 37,000 N/A N/A N/A |
| IAG's Intramural (HQ, Regions, ERT) Letter Contracts | N/A 26,000 N/A |
| TOTAL | 54 00,385 |
| Project Ceiling Percent of Project Funds Remaining | \$300,000 50.0 % |

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

> Date: March 17, 1993

Gad W. Tawadros, OSC From:

Removal Action Branch

To: W. Muszinski, EPA DRA

K. Callahan, ERRD-D

R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB

M. Pane, ERD-RAE-A

J. Marshall, 2EPD 2ORC-NJSUP

R. Gherardi, OPM-FIN

M. Mjones, OS-210

D. Mellot, EPA

J. McVeith; EPA

D. Schwenk, EPA

J. Frisco, EPA

L. Miller, NJDEPE

K. Kloo, NJDEPE

√ D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO: Fourteen (14)

II. Background

> Site No.: 9E

Delivery Order No.: 0027-02-019

Response Authority: CERCLA ERNS No.: N/A

NPL Status: Non-NPL

State Notification: NJDEPE Notified

Approved September 28, 1992 Action Memorandum:

Start Date: November 30, 1992

Demobilization Date: N/A Completion Date: N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- E. Site Description
- Site Background
 Refer to POLREF No. 1
- 2. Description of the Threat Refer to POLREP No. 1
- 3. Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- E. Situation
- 1. Current Situation

ERCS are preparing samples for shipment for disposal analysis. The site will be temporarily demobilized awaiting results.

2. Removal Actions to Date

ERCS started to demobilize equipment and material for the break during disposal analysis. There are 132 drums of hazardous material, PCB oils, decon water and empty drums. The total PVC raw material on site is approximately 100 cubic yards, in addition to approximately 150 cubic yards of finished vinyl siding and approximately 60.5 cubic yards of asbestos pipe insulation. Additionally, there are 73 labpacks of paints, pigments and other small containers.

On March 9, the 500 gallon PCB transformer was pumped and flushed. The 12 drums generated from the cleaning were temporarily staged on site and should be transported on March 18, 1993 to Waste-Tech Services of Pittsfield, MA for blending/incineration and the PPE will be shipped to Chemical Waste Management, Model City, NJ for landfill.

Four liquid samples will be sent for disposal analysis to Versar Lab in Springfield, VA. Two week turn around was requested. Disposal facilities will be contacted for a meeting on April 6 to bid on the waste with a closing date of April 9.

The OSC requested a time extension for delivery order #0027-02-019 until July 3, 1993 in order to complete removal activities as well as T&D all hazardous wastes.

The decon wash water is being analyzed for acceptance criteria and should be shipped out next week.

3. Enforcement

As before.

- C. Next Steps
- Once analytical for the liquid samples are received, disposal facilities will be contacted and the bidding of the waste will be done.
- 2. Recycling efforts will continue when the order is issued.

| DD 01 material and a | Cost to Date |
|---|-----------------------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 352,000 |
| TAT CLP Analytical Services REAC Regional Laboratory Services | 41,000 N/A N/A N/A |
| IAG's Intramural (HQ, Regions, ERT) Letter Contracts | N/A 28,000 N/A |
| TOTAL | \$421,000 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 47.4 % |

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U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. Heading

Date:

From:

April 1, 1993

W. J. J. __
Gad W. Tawadros, OSC Removal Action Branch

To:

W. Muszinski, EPA DRA K. Callahan, ERRD-D R. Salkie, ERR-DDNJP G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 20RC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA J. McVeith, EPA D. Schwenk, EPA J. Frisco, EPA

T. Miller, NJDEPE K. Kloo, NJDEFE

JD. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

Subject:

Vanguard Vinyl Siding Site, Foot of Charles Street and Water Street, Gloucester City, Camden County,

New Jersey

POLREP NO:

Sixteen (16)

II. Background

Site No.:

9 E

Delivery Order No.:

0027-02-019

Response Authority: ERNS NG.:

CERCLA N/A

NPL Status:

Non-NPL

State Notification:

NJDEPE Notified

Action Memorandum:

Approved September 28, 1992

Start Date:

November 30, 1992

Demobilization Date:

N/A

Completion Date:

N/A

- A. Incident Category

 CERCLA incident category: Inactive Production Facility
- B. Site Description
- 1. Site Background

 Refer to POLREP No. 1
- Description of the Threat
 Refer to POLREP No. 1
- Preliminary Assessment Results
 Refer to POLREP No. 1

IV. Response Information

- A. Planned Removal Action
 Refer to POLREP No. 1
- B. Situation
- Current Situation

Partial results from the disposal analysis have been received and tentative disposal options are being investigated. Eight disposal facilities have been invited to bid on the wastes; of these eight, six have accepted. The Nationally Significant Action Memo has been submitted for branch review.

2. Removal Actions to Date

Guardian contacted eight facilities for the disposal bid walk thru on April 6, 1993. The following facilities have agreed to attend: Chem Waste, ENSCO, ECA, Code Environmental, NES and Southdown. Awaiting to hear from Clean Harbors and Capital Environmental. On March 31, EPA, TAT and GES T&D coordinator met to discuss disposal options for all liquid wastes utilizing the partial data received. The wastes carry D001, D003, F002 and potentially other D codes which will be determined once the remaining analytical results are received. The Nationally Significant Action Memo to address the asbestos materials on site was submitted for branch review on March 29, 1993.

3. Enforcement

As before.

- c. Next Steps
- On April 2, Region III TAT will be on site with their magnetometer to assess areas of suspected buried drums.
- ERCS will start bulking the wastes on April 5, 1993.
- 3. On April 6, the bid walk for disposal of the wastes will take place with bids due by April 9. Once the facility is chosen wastes will be shipped off site.

| | Cost to Date |
|--|---|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 370,500 |
| TAT CLP Analytical Services REAC Regional Laboratory Services IAG's Intramural (HQ, Regions, ERT) Letter Contracts | 45,500 N/A N/A N/A N/A 32,000 N/A |
| TOTAL | \$458,000 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 42.75% |

MAR 25 '33

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

Heading I.

March 24, 1993 Date:

Gad W. Tawadros, OSC From: Removal Action Branch

W. Muszinski, EPA DRA To:

K. Callahan, ERRD-D R. Salkie, ERR-DDNJP

G. Zachos, ERR-RAB M. Pane, ERD-RAB-A

J. Marshall, 2EPD 2ORC-NJSUP

R. Gherardi, OPM-FIN M. Mjones, OS-210 D. Mellot, EPA

J. McVeith, FPA D. Schwenk, EPA

J. Frisco, EPA L. Miller, NJDEPE

K. Kloo, NJDEPE √D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey

Fifteen (15) POLREP NO:

II. Background

9E Site No.:

0027-02-019 Delivery Order No.:

Response Authority: CERCLA ERNS No.: N/A NPI, Status: Non-NPL

State Notification: NJDEPE Notified

Action Memorandum: Approved September 28, 1992

Start Date: November 30, 1992

Demobilization Date: N/A Completion Date: N/A

ALL-CHITTILE

- A. Incident Category
 - CERCLA incident category: Inactive Production Facility
- B. Site Description
- 1. Site Background

Refer to POLREP No. 1

2. Description of the Threat

Refer to POLREP No. 1

3. Preliminary Assessment Results

Refer to POLREP No. 1

- IV. Response Information
 - A. Planned Removal Action

Refer to POLREP No. 1

- B. Situation
- 1. Current Situation

ERCS shipped samples to lab for disposal analysis. Awaiting liquid wastes analytical results in order to transport and dispose of the hazardous wastes. ERCS continues demobilization pending analytical results.

2. Removal Actions to Date

ERCS continued to demobilize equipment and material for the break during disposal analysis. The four liquid samples were sent for disposal analysis to Versar Lab in Springfield, VA. Two week turn around was requested. Disposal facilities will be contacted for a meeting on April 6 to bid on the waste with a closing date of April 9.

The PCB contaminated oil was transported on March 18, 1993 to Waste-Tech Services of Pittsfield, MA for blending/incineration and the PPE was shipped to Chemical Waste Management, Model City, NJ for landfill.

On March 19, the Gloucester City mayor, Director of Public Works, Fire Chief and Haz Mat Coordinator met with the OSC and conducted a site visit. The Mayor discussed the mitigative measures with the OSC to remove and dispose of the asbestos materials stored on site.

Nationally Significant Action Memo is in progress.

A decision was reached by the RAP to allow the PVC raw materials and vinyl siding to be shipped for recycling. Efforts to contact the recycler are underway.

On March 24, the decon wash water was transported to Chem Waste Management in Newark, NJ for wastewater treatment.

3. Enforcement

As before.

- C. Next Steps
- 1. Once analytical results for the liquid samples are received, disposal facilities will be contacted and the bidding of the waste will proceed.
- 2. Recycling efforts will continuc.

| | Cost to Date |
|---|--------------|
| Clean-up Contractor "Includes awaiting bill for all the asbestos abatement subcontract" | 365,100 |
| TAT | 43,500 |
| CLP Analytical Services | N/A |
| REAC | N/A |
| Regional Laboratory Services | N/A |
| IAG'S | N/A |
| Intramural (HQ, Regions, ERT) | 30,000 |
| Letter Contracts | N/A |
| TCTAL | \$438,600 |
| Project Ceiling | \$800,000 |
| Percent of Project Funds Remaining | 45.2 % |

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U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: August 5, 1993

Subject: Vanguard Vinyl Siding Site, Foot of Charles Street

and Water Street, Gloucester City, Camden County,

New Jersey 415-11C

Gad W. Tawadros, OSC From:

Removal Action Branch

W. Muszynski, EPA DRA

K. Callahan, ERRD G. Pavlou, ERRD

R. Salkie, ERR-DDNJP

G. Zachos, ERR-RAB

M. Pane, ERD-RAB-A J. Marshall, 2EPD

R. Gherardi, OPM-FIN

M. Mjonnes, OS-210

D. Mellot, EPA

J. McVeigh, EPA

D. Schwenk, EPA

J. Frisco, EPA

L. Miller, NJDEPE

✓K. Kloo, NJDEPE

D. Triggs, NJDEPE

ERD, Washington, (E-Mail)

Bob Saunders, Gloucester City - OEM

TAT

POLREP NO:

18 and final

II. BACKGROUND

Site No.:

9E

Delivery Order No.:

0027-02-019

Response Authority:

CERCLA

ERNS No.: NPL Status:

N/A

State Notification:

Non-NPL NJDEPE Notified EPA on March 11,

Action Memorandum:

Approved September 28, 1992

Start Date:

December 10, 1992

Demobilization Date:

July 1, 1993

Completion Date:

July 2, 1993 All field activities

terminated

III. SITE INFORMATION

A. <u>Incident Category</u>

CERCLA incident category: Inactive Production Facility

B. <u>Site Description</u>

1. Site Background

The Vanguard Vinyl Siding Site (VVS) is located in Gloucester City, Camden County, in an industrial section of southwest New Jersey. The site consists of two connected manufacturing buildings (#3 and 10), on approximately 2.06 acres of property. Historically, the site was owned by Ruberoid Corporation who manufactured asbestos piping and shingles. In 1967, Ruberoid merged with GAF. From 1981 until 1983, VVS operated at the site producing plastic siding for homes and other buildings. The raw materials (PVC resin, stabilizers, plasticizers and pigments) were delivered by truck or rail car to the facility and the resin was stored in silos and mixed with stabilizers or pigments, then extruded in one of six process operations.

2. Description of the Threat

On March 11, 1992, the New Jersey Department of Environmental Protection and Energy (NJDEPE) requested the EPA-Region II, Removal Action Branch to perform a CERCLA removal action at the VVS site. A preliminary assessment and removal evaluation were conducted on April 1, 1992. A threat of fire posed by the PVC materials existed. A fire would have resulted in a release of hydrochloric acid and vinyl chloride vapors to the nearby residential community.

C. <u>Preliminary Assessment Results</u>

During the preliminary assessment conducted on April 1, 1992, two buildings were investigated. This assessment revealed approximately 50-70 containers of varying sizes within and outside of the building, containing hazardous materials, oils, pigments, stabilizers, asbestos, PVC resins and some unknowns. Additionally, 60-70 boxes of powders (possibly PVC resins) and 35 bags of unknown powder were contained within the buildings at the site.

Samples were collected during the April 1, 1992 assessment for hazard categorization. Soil samples were analyzed for asbestos; 2-3% chrysotile asbestos was confirmed. Additionally, drum and powder samples revealed elevated levels of tetrachloroethylene, toluene and xylene.

IV. RESPONSE INFORMATION

A. <u>Situation</u>

1. Current Situation

The scope of work proposed for Phase 1 of this project was successfully completed on July 2, 1993.

The OSC will continue with administrative activities associated with this removal.

The site is currently demobilized pending approval of the Nationally Significant Action Memorandum to remove and dispose of the stabilized asbestos material.

2. Removal Actions to Date

On June 23 through July 1, 1993, the ERCS contractor strapped and bundled all of the abandoned vinyl siding product. The majority of this material was transported by Marcor to the Memphis Plastics facility for recycling.

Approximately 20 cubic yards of the abandoned vinyl siding remains on site. Due to the July 3 expiration of the ERCS contract, Memphis will provide the transportation and remove the remaining abandoned product, at no cost to the EPA, when they relieve their storage in the near future.

3. Enforcement

An Administrative Order Directing compliance with Request for Access, issued to Vanguard Vinyl Siding, Inc., was signed by the Regional Administrator on April 19, 1993. Four PRP's were identified by ORC Enforcement action are in progress.

B. <u>Planned Removal Actions</u>

The VVS removal action consisted of removal of the CERCLA Hazardous Substances (excluding asbestos) and PVC material inside and outside the facility. The asbestos material inside the structure, posing significant hazard to the ERCS contractor was containerized/stabilized and stored on site.

C. <u>Next Steps</u>

Awaiting for the Nationally Significant Action Memorandum approval. This Action Memorandum will address the stabilized asbestos stored in building # 10, the above ground storage tank containing asbestos and the asbestos soil investigation of the two courtyards.

The OSC Report for Phase 1 of this project is in progress.

D. <u>Kev Issues</u>

The removal action was effective in mitigating the threat of all CERCLA Hazardous substances. All containerized materials characterized, overpacked and shipped for disposal. All asbestos contaminated materials and damaged asbestos insulation have been stabilized and stored on site.

A Request for Ceiling Increase Action Memo is pending the RA approval to mitigate the asbestos threat on site.

V. ESTIMATED COST INFORMATION

| | Cost to Date |
|---|--------------------|
| Cleanup Contractor | \$417,105 |
| "Includes awaiting bill for all the asbestos abatement subcontractor" | |
| TAT Intramural (HQ, Regions, ERT) | 60,000 40,000 |
| TOTAL | \$517,105 |
| Project Ceiling Percent of Project Funds Remaining | \$800,000 35.4% |

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractors. Other financial data, which the OSC must rely upon, may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

VI. DISPOSITION OF WASTES

| | ī | 1 | | | |
|---------------------------------------|-----------------|-----------------------------------|--|-----------------------------|---------------------------------------|
| WASTESTREAM | MEDIUM | QUANTITY | CONTAMINATION MITIGATION CONTROL | TREATMENT | DISPOSAL |
| Asbestos | Solid | 60.5 cu yds | Wetted, Double Bagged | Secured on site | _ |
| Asbestos Contaminated Materials | Solid Sludge | 320 cu yd 120 55- gal drums | Double bagged and boxed Drummed | Landfill | HAM Sanitary Landfill Peterstown WV |
| Asbestos Wastewaters | Liquid | 3,000 gallons | Drummed | Wastewater Treatment | CWM Newark, NJ |
| Lab Packs | Liquid | 100 gallons 3 drums | Drummed | Incineration | NES Wampsville NY |
| Neutral Liquids | Liquid | 150 gallons 3 drums | Drummed | Wastewater Treatment | NES Wampsville N |
| Contaminated soil | Solid | Three drums | Drummed | Landfill | NES Wampsville NY |
| Organic Liquids | Liquid | 800 gallons 17 drums | Drummed | Incineration /full blending | NES Wampsville NY |
| Oxidizers | Liquid | 70 gallons 2 drums | Drummed | Incineration | NES Wampsville NY |
| PCB Oils | Liquid | 2,287 Kg 12 drums | Drummed | Incineration | Clean Harbors, Braintree, MA |
| PPE | Solid | 22-55- gallon drums | Drummed | Landfill | CWM Model City, NY |
| PVC Resin | Solid | 30 tons | Boxed, drummed | Recycle | Memphis Plastic Phila. PA |

All abandoned vinyl siding product were strapped and bundled and shipped for recycling with exception of about 20 c.y. will be shipped of site by the Recycling facilities at no cost to EPA.

ATTACHMENT S

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING **NEW YORK, NEW YORK 10278**

ACTION MEMORANDUM

DATE:

·SEP 23 1993

SUBJECT:

Request for a Ceiling Increase at the Vanguard Vinyl

Siding Site, Gloucester City, Camden County, New Jersey

FROM:

Mark P. Pane, Chief

Removal Action Section A

TO:

William J. Muszynski, P.E.

Acting Regional Administrator

THRU:

George Pavlou, Acting Director Emergency and Remedial Response Division

Site ID# 9E

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the proposed ceiling increase at the Vanguard Vinyl Siding (VVS) Site Removal Action described herein. The site is located at the foot of Water and Charles Streets, Gloucester City, New Jersey, 08030. The funding requested in this memorandum is necessary to remove and dispose of the asbestos waste materials which are posing a threat of release at the site. The memorandum requests a ceiling increase of \$235,000, of which \$175,000 is for mitigation contracting. This increase, if approved, would raise the total project ceiling to \$1,035,000, of which \$765,000 is for mitigation contracting. The proposed action is of national significance since it will be taken solely to mitigate the threat posed by asbestos in an industrial area.

II. SITE CONDITIONS AND BACKGROUND

This Action Memorandum documents the time-critical removal action for this site and has a Comprehensive Environmental Response, Compensation, and Liability Information System ID number of NJD982530073.

STREET, 5

A. Site Description

1. Removal site evaluation

The VVS site occupies approximately 2.06 acres in an industrial section of Gloucester City. The Ruberoid Corporation produced asbestos piping and asbestos shingles at this location from 1950 through the 1960s. In 1967, Ruberoid merged with the GAF Corporation and continued asbestos product manufacturing until 1971. Between 1971 and 1981, GAF operated at the site producing vinyl siding. VVS purchased the property in 1981. VVS operated from 1981 to 1983, manufacturing plastic siding for use in residential and industrial construction. Sometime in 1983, VVS declared bankruptcy and abandoned the site. The liquidation bankruptcy proceeds were completed in 1985. VVS remains the record owner of the site.

A removal action was initiated in December, 1992, to secure the site and dispose of all hazardous materials, except asbestos waste, that had been abandoned. The asbestos material was stabilized during that action while Potentially Responsible Parties (PRPs) were being investigated. The PRP investigations are still ongoing, however the effectiveness of the asbestos stabilization action has continued to decline due to consistent acts of vandalism at the site.

2. Physical location

The VVS Site is located in an industrial section of the city. The site is bounded by Water Street to the East, a vacant facility owned by GAF to the South, the Delaware River to the West and Koch Fuel Terminal to the North (see Attachment A, Figure 1). The nearest residential area is located less than 1,000 feet from the site. A large apartment complex (Gloucester Town) is located approximately 2,000 feet northeast of the site. Several schools, parks and playgrounds are located within one-half mile from the site.

3. Site characteristics

The VVS Site consists of two manufacturing buildings, #3 and #10, that have been interconnected by smaller structures (see Attachment A, Figure 2). Historical site activities included the production of asbestos piping and asbestos shingle. VVS operated at the site from 1981 through 1983. During its operations, VVS produced plastic siding for homes and other buildings. The facility is now abandoned.

From recent analysis, the presence of asbestos has been confirmed in several locations. Records reveal that asbestos products were both manufactured and used in these buildings in the past.

Asbestos contamination inside buildings #3 & #10 was addressed by the previous removal action. This removal action is a restart.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Asbestos is a hazardous substance as defined by Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The asbestos posing a threat of release at this site exists in three separate areas. The first area is inside Building 10 and is bagged asbestos waste which was stabilized during the initial removal action. There is approximately 60 cubic yards of bagged asbestos waste staged in this building. The second location is in the soil between Buildings 3 and 10. This soil has been sampled between zero and three inches from the surface and found to contain 2% to 3% asbestos. The third location is also between building 3 and 10 and is in an aboveground 10,000 gallon storage tank. This tank has seriously deteriorated due to weather and is believed to contain over 5,000 gallons of asbestos material.

The mechanism for past releases at the VVS Site appears to have been spills, poor housekeeping and illegal disposal practices during the manufacturing of products that contained asbestos. The subsequent releases of asbestos in friable form to the air and soil include deterioration of the tank or containers, and disturbance by trespassers of the asbestos EPA stabilized. The buildings have shown evidence of trespassing and vandalism which increases the risk of a release of the bagged asbestos.

5. National Priorities List (NPL) status

The VVS site is not a NPL site and is not proposed for listing at this time.

6. Maps, pictures and other graphic representations

See Attachment A, Figures 1 and 2.

- B. Other Actions to Date
- 1. Previous actions

On March 6, 1985, a PRP consultant sampled soil in several areas of the site. The results from one area indicated the presence of petroleum hydrocarbons, 1,2-dichloroethane, tetrachloroethane, and di-n-octyl phthalate. No other sampling or mitigative activities were taken by the PRPs.

No other government or private actions have been undertaken at the VVS site.

2. Current actions

On September 28, 1992, the Regional Administrator approved a total project ceiling of \$800,000 for a removal action at the VVS site. The scope of work for this removal action was to stabilize all friable asbestos and dispose of all hazardous substances.

The EPA removal action began in December 1992, and was effective in mitigating the threat of all listed CERCLA hazardous substances. As of May 18, 1993, all containerized materials have been sampled, characterized, overpacked and shipped for disposal. All asbestos contaminated materials and damaged asbestos insulation have been stabilized and stored on-site. This asbestos is continuing to pose a threat of release due to acts of vandalism at the site. The action proposed in this memorandum is to remove and dispose of this asbestos waste.

C. State and Local Authorities' Roles

1. State and local actions to date

The New Jersey Department of Environmental Protection and Energy (NJDEPE) issued Notices of Violation to VVS on November 5, 1986 and August 8, 1991. VVS failed to respond to these notices. The current mortgage holding company, ITT Diversified Credit Corporation, refuses property foreclosure, apparently since it would trigger an Environmental Cleanup Responsibility Act (ECRA) response. Since the mortgage is uncollectible, ITT Diversified Credit Corporation has distanced itself from any cleanup responsibilities. EPA has determined that ITT is not a viable PRP because they are not owners of the site.

On February 20, 1992, the NJDEPE personnel identified the presence of approximately 30 containers of varying sizes and conditions. Labels indicated that the drums contained ethylene glycol, oils, solvents, asbestos, 2-diethylhexyl phthalate, acrylic resin and titanium pigment. In addition, several unlabeled drums and shattered laboratory reagents were found scattered throughout the lab area. Following their assessment, on March 11, 1992, the NJDEPE referred the site to EPA for a CERCLA Removal Action. NJDEPE requested that EPA stabilize the asbestos and characterize, overpack and dispose of all chemical and related material to safeguard the health and welfare of the local population.

2. Potential for continued State/local response

The NJDEPE referred the cleanup action to EPA. The State can not take timely action and the local government does not have the resources to respond and dispose of the asbestos at the site.

The State will continue to play a supporting role in the EPA cleanup. There are no State or local lead cleanup activities planned at this time.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Asbestos is a known carcinogen and causes the respiratory disease, asbestosis. The route of entry is through inhalation and ingestion. Excessive cancer risks have been demonstrated at all fiber concentrations studied to date.

A. <u>Statutory and Regulatory Authorities</u>

Asbestos is a designated hazardous substance as listed in 40 CFR Table 302.4. Friable forms of asbestos in the soil, tank and bags of material on-site threaten surrounding residents with airborne exposure. This site continues to meet the following criteria for a removal action as cited in 40 CFR 300.415(b)(2):

- (i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;
- (iii) Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;
- (iv) High levels of hazardous substances or pollutants or contaminants in the soils largely at or near the surface may migrate;
- (vii) The availability of other appropriate Federal or state response mechanisms to respond to the release.

B. Threats to Public Health or Welfare

The threat of exposure through direct contact with containers of asbestos, or soil containing asbestos is present at the site. The property and buildings have been accessed by trespassers, as evidenced by fires, graffiti and skateboarding ramps. The Gloucester City Fire Department has documented fires that have occurred over the years.

A release into the environment could potentially impact a residential neighborhood located 1,000 feet from the site. In addition, there are numerous schools, churches and a senior citizens apartment complex located within one-half mile of the site. All other CERCLA hazardous substances were removed from the site in the original removal action. Site security has been discontinued. Unauthorized access is still possible though holes in the perimeter fencing as a result of continuing vandalism. There are also numerous open doors, broken windows and holes in the walls of the building.

C. Threats to the Environment

Weather conditions or acts of vandalism could easily cause the asbestos contamination to be released into the environment. Environmental concerns regarding a release at this site include the natural flora and fauna which may exist along the Delaware River Boat Basin.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

Proposed action description

The objective of this project is to eliminate the threat of direct contact with asbestos waste currently posed at the VVS Site. There are three sources of contamination to be removed. The first source is the asbestos which was stabilized during the initial Removal Action. The second source is the asbestos materials inside the deteriorating 10,000 gallon tank located at the south center courtyard. The third source is the asbestos contaminated soil in the courtyards.

The tank of asbestos will be handled by removing the material from the tank and decontaminating it. Soil sampling will be conducted in the courtyards to determine the extent of soil contamination. Based on the findings, appropriate actions will be taken to mitigate the threat posed by this contamination (i.e., removal of the soil or capping of the area which is presently inaccessible to any type of excavation equipment).

This cleanup action will not address the removal of existing asbestos pipe insulation that remains in the building, since it was undamaged and encapsulated in the original Removal Action.

All analytical data will have the appropriate levels of QA/QC to verify the extent of contamination sampling. Disposal of all asbestos will be at an off-site facility that is in compliance with the EPA Resource Conservation and Recovery Act (RCRA) policies.

Upon completion of this action no further activities are planned by EPA. Therefore, there will be no need for any post removal site controls.

2. Contribution to remedial performance

The VVS Site has not been designated as an NPL site and no long-term remedial activities are planned at this time. Upon completion of this removal action no further activities are planned by EPA. The NJDEPE will be notified and they will determine the site's applicability under the ECRA Program. Since any of the proposed actions would be required in any future response, the scope of work is consistent with any permanent remedy. Actions proposed at this site will address those threats meeting the National Contingency Plan Section 300.415(b)(2)(i)(iii)(iv) and (vii) discussed in Section III.

3. Descriptions of alternative technologies

Disposal options for the asbestos materials present on-site have been investigated thoroughly. Landfilling appears to be the best available method of disposal based on the selection criteria for effectiveness, implementability and cost. Should additional disposal options be made available, they will be evaluated on the same criteria.

4. Engineering Evaluation/Cost Analysis (EE/CA)

Since the proposed Removal Action is time-critical this section is not applicable.

5. Applicable or relevant and appropriate requirements (ARARS)

ARARs that are within the scope of this removal action which pertain to the excavation, stabilization and disposal of asbestos will be attained to the extent practicable.

Federal ARARs which have been determined to apply to the VVS site removal action include RCRA, the Toxic Substances Control Act, and the Hazardous Materials Transportation Act.

Project schedule

The removal action at the site will begin upon approval of this Action Memorandum. The scope of work outlined in this action memorandum will take approximately one month of on-site activities to complete. This time frame may be extended if approval from an acceptable disposal facility can not be secured.

B. <u>ESTIMATED COSTS</u>

| Extramural Costs: | _ | urrent eiling | | ated Cost his Project | | roposed eiling |
|--|----------|-------------------|----------|--------------------------|-----|--------------------|
| Regional Allowance Costs | : | | | | | |
| Estimated (ERCS) Costs (incl. 20% Contingency) (Rounded) | \$ | 590,000 | \$ | 175,000 | \$ | 765,000 |
| Other Extramural Costs N | ot | Funded 1 | From t | he Regional | Al: | lowance: |
| Estimated TAT Costs | \$ | 29,430 | \$ | 18,828 | \$ | 48,258 |
| Extramural Subtotal 15% Project Contingency | \$ \$ | 619,430 92,914 | | 193,828 29,074 | | 813,258 121,988 |
| TOTAL EXTRAMURAL COSTS INCL.CONTINGENCIES Rounded | \$ | 712,344 | \$ | 222,902 | \$ | 935,246 |
| Intramural Costs: | | | | | | |
| Intramural Direct Costs. EPA Regional personnel | \$ | 13,200 | \$ | 11,362 | \$ | 24,562 |
| (HQ, Region, and) | \$ | 40,000 | \$ | -0- | \$ | 40,000 |
| Total EPA Costs | \$ | 53,200 | \$ | 11,362 | \$ | 64,562 |
| TOTAL PROJECT CEILING | \$ | 765,544 | \$ | 234,264 | \$ | 999,808 |
| ROUNDED | \$ | 800,000* | S | 235,000 | \$1 | .035.000 |

^{*} This amount reflects an error in the September 28, 1992 Action Memorandum.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delaying this action will increase the possibility of a release at the site. There is no security at the site and acts of vandalism are expected to continue. This may cause a release which would impact anyone in contact with the materials and possibly the surrounding community.

VII. OUTSTANDING POLICY ISSUES

The removal involves nationally significant and precedent setting issues because the action will be taken solely to mitigate the threat posed by asbestos in an industrial area. Other hazardous substances that were left on-site were removed in the first removal action taken. The asbestos was stabilized during that action while PRPs were being investigated. The PRP investigations are still ongoing, however the effectiveness of the asbestos stabilization action has continued to decline due to consistent acts of vandalism at the site.

VIII. ENFORCEMENT

Vanguard Vinyl Siding, Inc. did not respond to Notices of Violation issued by NJDEPE on November 5, 1986 and August 8, 1991. In 1983, Vanguard filed for bankruptcy in U.S. Bankruptcy Court. The bankruptcy (liquidation) proceedings were completed in 1985. According to the New Jersey Secretary of State's office, Vanguard's corporate status is "void."

An Administrative Order Directing Compliance With Request for Access, issued to Vanguard Vinyl Siding, Inc., was signed by the Regional Administrator on April 19, 1993.

(Please see confidential addendum for further information.)

IX. RECOMMENDATION

This decision document represents the selected removal action for the VVS Site in Gloucester City, Camden County, New Jersey, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the criteria for a removal under the NCP Section 300.415(b)(2) and I recommend your approval of the proposed removal action. The total project ceiling if approved will be \$1,035,000, of which \$765,000 is coming from the Regional removal allowance.

There are sufficient funds in our current Advice of Allowance to fund this cleanup.

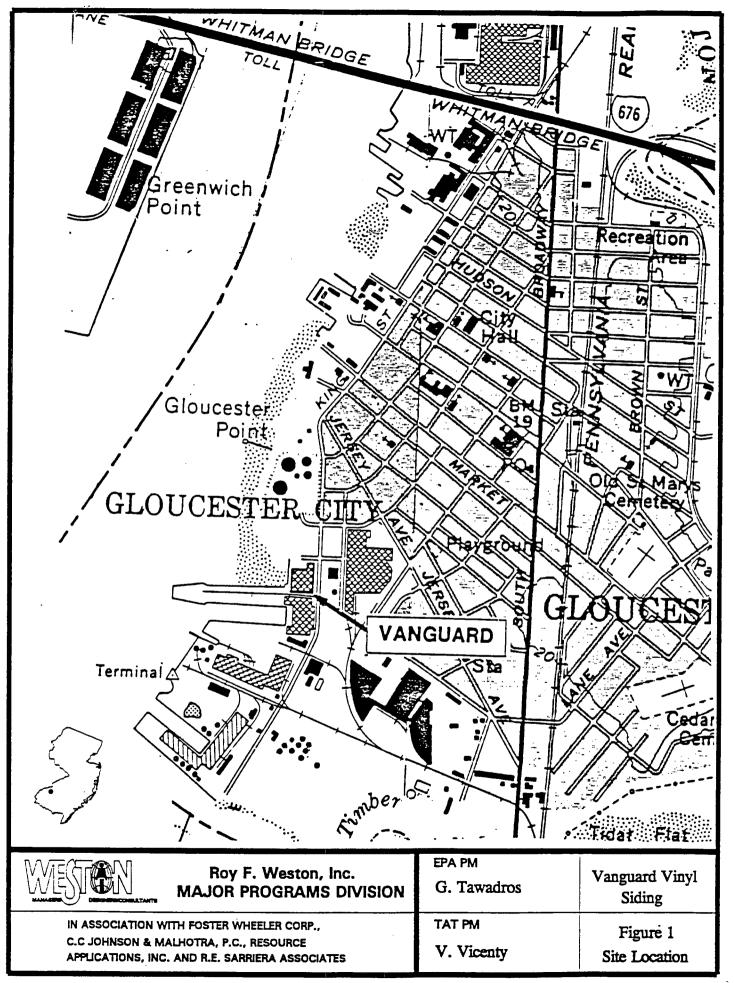
Please indicate your approval and authorization of funding for the VVS Site, as per current Delegation of Authority, by signing below.

| Approval | William J. Muszynski F.E. Acting Regional Administrator | Date: | 9/29/53 |
|-------------|--|-------|---------|
| Disapprova] | William J. Muszynski, P.E. Acting Regional Administrator | Date: | |

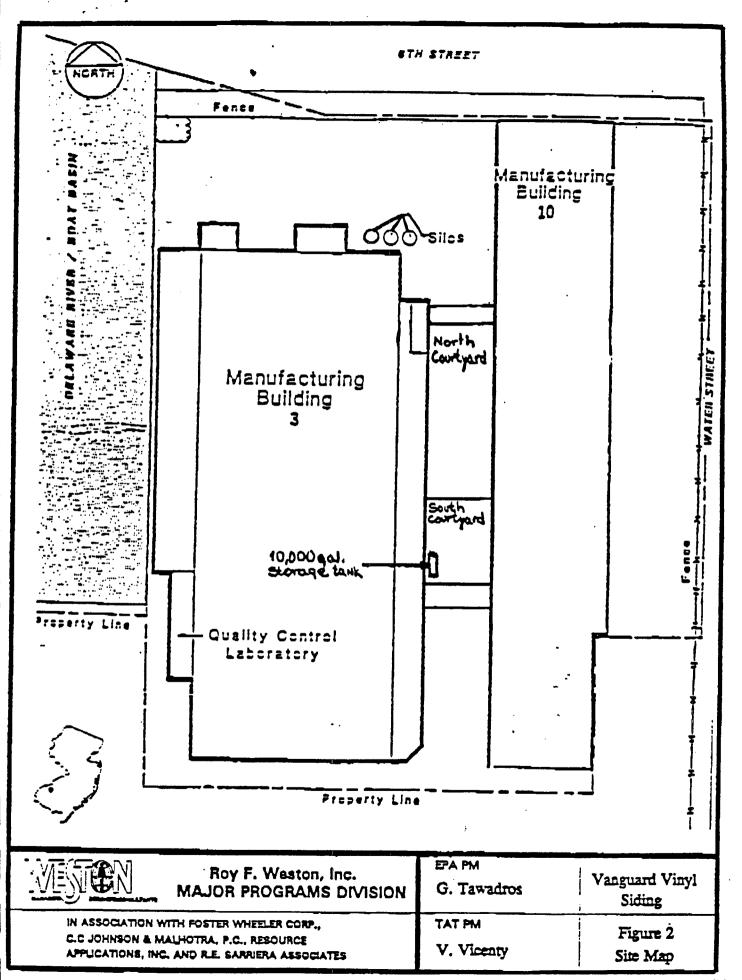
cc: (after approval is obtained)

- K. Callahan, DRA
- G. Pavlou, ERRD-D
- R. Salkie, ERRD-ADREPP J. Frisco, ERRD-DDNJP
- G. Zachos, ERRD-RAB
- M. Pane, ERRD-RAB-A
- J. Marshall, EPD
- J. McVeigh, ORC-NJSUP
- R. Gherardi, OPM-FIN
- P. Cutts, OPM-FAM C. Moyik, ERRD-PS
- D. Dietrich, 5202G
- T. Grier, 5202G
- M. Mjoness, 5202G
- L. Miller, NJDEPE
- K. Kloo, NJDEPE
- C. Kelley, TATL

ATTACHMENT A MAPS



ATTACHWENT



PITPORKENT L

ATTACHMENT B

ENFORCEMENT ADDENDUM

* * CONFIDENTIAL * * * CONFIDENTIAL * * * CONFIDENTIAL * *

DO NOT RELEASE UNDER FOIA - ENFORCEMENT SENSITIVE

DO NOT PLACE IN ADMINISTRATIVE RECORD

DO NOT RELEASE TO PUBLIC

CONFIDENTIAL ENFORCEMENT ADDENDUM

Vanguard Vinyl Siding Site Gloucester City, Camden County, New Jersey

A. Potentially Responsible Parties ("PRP") Search:

The current record owner of the site is Vanguard Vinyl Siding, Inc. ("Vanguard"). In 1983 Vanguard underwent liquidation bankruptcy proceedings in U.S. Bankruptcy Court which were completed in 1985. New Jersey Secretary of State records show Vanguard's corporate status as "void." Therefore, Vanguard Vinyl Siding, Inc. is not a viable PRP. ITT Commercial Finance Corporation ("ITT"), the holder of Vanguard's mortgage, has not foreclosed on the property, apparently to avoid New Jersey's Environmental Cleanup & Responsibility Act.

The Ruberoid Corporation produced asbestos building materials at the site during the 1950s and 1960s. In 1967 Ruberoid merged with the GAF Corporation ("GAF"). According to GAF's response to EPA's § 104(e) information request, GAF produced asbestos insulation at the site from 1967 to 1971 and thereafter manufactured vinyl siding. Vanguard purchased the property in 1981 and manufactured vinyl siding.

GAF is responsible for hazardous substances found at the site if the hazardous substances were disposed of at the site at the time GAF owned or operated the site. EPA is currently investigating whether GAF used a large storage tank found at the site that contains asbestos.

Notices of Violation issued by the NJDEPE in 1986 and 1991 to Vanguard, as well as NJDEPE's enforcement efforts against ITT, were unsuccessful in prompting either Vanguard or ITT to address the removal of hazardous materials remaining on-site.

B. <u>Notification of PRPs of Potential Liability and of the Required Removal Action</u>

Based on their response to the § 104(e) information request, EPA sent a notice letter to GAF. In response, GAF's "Notice of Intent" stated that while it is interested in entering into

AT ACTION END

discussions with EPA, GAF believes that it is premature for it to commit to negotiate an agreement with EPA to perform a removal action until it has additional information regarding the finding of endangerment at the Site and EPA's preliminary determination that GAF is a PRP.

C. <u>Decision Whether to Issue an Order</u>

The Region's decision whether to issue an administrative order to GAF will depend upon EPA's ability to link GAF with a disposal of asbestos at the Site at the time GAF owned and operated at the Site. If EPA issues an order to GAF, the order would most likely require GAF to dispose of the stabilized asbestos containing materials at the site.

An Administrative Order Directing Compliance With Request for Access, issued to Vanguard Vinyl Siding, Inc., was signed by the Regional Administrator on April 19, 1993.

D. Negotiation and Order Issuance Strategy

Any negotiations and order issuance regarding GAF's performance of the actions proposed in this Action Memorandum would occur after this Action Memorandum has been approved.

Given the history of fires and vandalism at the Site, EPA may initiate the proposed response actions prior to issuance of any administrative orders. In the event that EPA receives a favorable response from any of the PRPs during EPA's performance of the Removal Action, a decision will be made to either complete the required actions or stabilize the hazardous materials pending the outcome of PRP negotiations. At the present time, it is the consensus of PSB, ORC and RAB that GAF's removal of asbestos materials would be the most likely possibility of PRP involvement.

ATTACHMENT T

WORK PLAN FOR SITE INSPECTION

NAME OF SITE: VANGUARD VINYL SIDING, INC.

AKA: GAF VANGUARD VINYL SIDING

ADDRESS: CHARLES AND WATER STREETS

MUNICIPALITY: GLOUCESTER CITY COUNTY: CAMDEN

EPA ID NUMBER: NJD9825300073

ACCESS GRANTED ? YES

SITE CONTACT(S): BOB SWANDER PHONE: 609-456-0060

FIRE CHIEF

AERIAL PHOTOS REVIEWED ? BY E. STEWART

BACKGROUND INFORMATION:

VANGUARD VINYL SIDING PRODUCED PLASTIC SIDING FOR HOMES FROM 1981 THROUGH 1983 USING PVC RESINS, STABILIZERS, PLASTICIZERS AND PIGMENTS IN THE PRODUCTION PROCESS. SITE ACTIVITIES, DATING BACK TO THE 1950s, INCLUDED THE PRODUCTION OF ASBESTOS PIPING AND ASBESTOS SHINGLES WHILE UNDER OWNERSHIP BY THE RUBBEROID CORPORATION. THE FACILITY CONSISTS OF TWO MAIN BUILDINGS INTERCONNECTED BY WALKWAYS ENCLOSING TWO COURTYARDS. MATERIALS WERE PREDOMINANTLY STORED IN DRUMS, TANKS AND SILOS SITUATED ON AN OUTDOOR CONCRETE PAD ON THE NORTH SIDE OF THE MAIN BUILDING. DRUMS WERE ALSO STORED ON AN INDOOR DRUM RACK SITUATED IN THE NORTH WALKWAY. A 10,000-GALLON ABOVE GROUND STORAGE TANK, FILLED WITH RESIDUAL ASBESTOS, IS LOCATED IN THE SOUTH COURTYARD. THE ABANDONED FACILITY IS 2.06 ACRES IN SIZE AND IS SITUATED IN AN INDUSTRIAL PARK ADJACENT TO THE DELAWARE RIVER. MOST OF THE FENCED PROPERTY IS OVERGROWN WITH TREES AND SHRUBS OR PAVED IN ASPHALT.

| AREA OF CONCERN | AREA/VOLUME OF AREA OF CONCERN | # OF SAMPLES |
|---|-----------------------------------|--------------|
| 1. RUNOFF FROM OUTDOOR PAD | 40 feet long | 2 |
| 2. RUNOFF FROM INDOOR DRUM RACK | | 2 |
| 3. INDOOR FLOOR TRENCHES | 10' BY 3' (EACH) | 4 |
| 4. ADJACENT TO 10,000-GALLON ABOVEGROUND STORAGE TANK | | 1 |
| 5. RUSTED DRUM CARCASSES | | 1 |

PRESAMPLING ASSESSMENT CHECK - OFF LIST

OWNERS NOTIFIED

YES

ROUTE TO HOSPITAL MAP YES

WAREHOUSE CONTACTED (24 HOURS NOTICE)

MONITORING INSTRUMENTS:

OVA

X-MET

HNu

EXPLOSIMETER

RAD METER

Equipment:

SLAMBAR

ph PAPER

TYVEK

RESPIRATOR

HARD HATS

BOOTIES

CARTRIDGES

COVERALLS

GLOVES

IDENTIFICATION

WORK BOOTS

H₂O COOLER

STAKES

TOOL BOX

DUCT TAPE

RAIN GEAR

WELL - DEPTH INDICATOR

BOLT CUTTER

LOCKS

SAFETY GLASSES

PAPER TOWELS

WELL KEYS

FIELD LOG BOOK

GARBAGE BAGS

COMPASS

TAPE MEASURE

CAMERA

FILM

AUGER EXTENSION

AUGER

I. PRESAMPLING ASSESSMENT

DATE: SEPTEMBER 16, 1993

WEATHER CONDITIONS: CLOUDY, 70s

NJDEPE PERSONNEL: DAVID E. TRIGGS TITLE: HSMS II

BOB RAISCH HSMS II

SITE REPRESENTATIVES: BOB SWANDER FIRE CHIEF

OVA DECAL

HNu DECAL

SITE DESCRIPTION: (mention stained soil, stressed vegetation, topography, surrounding area, waste management units).

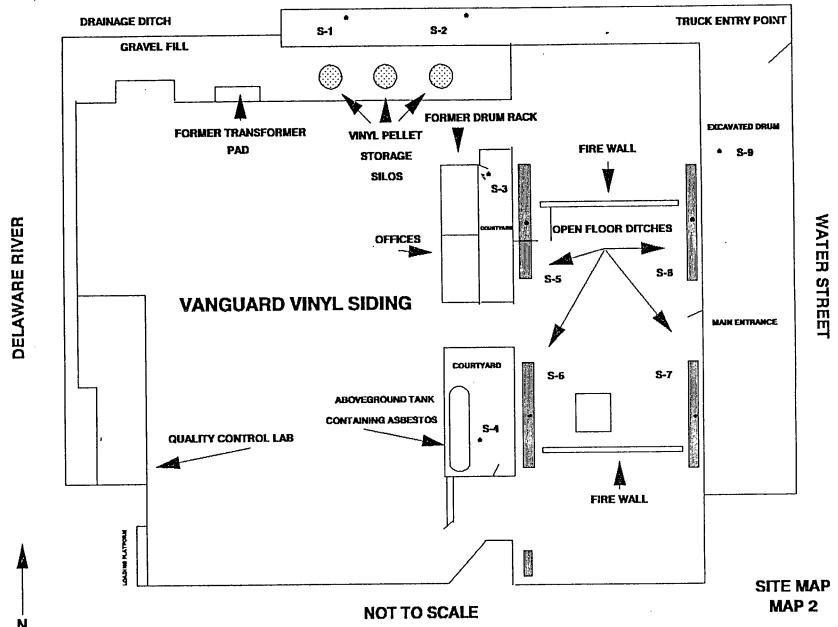
AREAS OF CONCERN NOTED DURING THE PSA AND NOT ADDRESSED AS PART OF THE EPA REMOVAL ACTION ARE THE FOLLOWING AREAS.

- 1. RUNOFF FROM FORMER DRUM STORAGE PAD (NORTH SIDE OF BUILDING)
- 2. RUNOFF FROM FORMER INDOOR DRUM STORAGE RACK
- 3. OPEN FLOOR TRENCHES WITHIN THE MAIN BUILDING
- 4. AREA SURROUNDING 10,000-GALLON ABOVEGROUND STORAGE TANK
- 5. RUSTED DRUM CARCASS

| SAMPLE IDENTIFICATION | OVA READING | HNU READING | SAMPLE JUSTIFICATION/DEPTH |
|--------------------------|----------------|----------------|---|
| S-1 | | | ADJACENT TO DRUM PAD (HIGHEST VOA READING ON CORE OR TO WATERTABLE FOR |
| s-2 | | ! ! | VOLATILES) (0 TO 6" OTHER) SAME AS S-1 |
| S-3 | |]] | RUNOFF ROUTE FROM INDOOR DRUM RACK |
| S-4 | ; | | (6" TO 24" VOLATILES) (0 TO 6" OTHER) COURTYARD SAMPLE ADJACENT TO 10,000 GALLON ABOVEGROUND STROAGE TANK (6" TO 24" VOLATILES) |
| S-5 | | | (0 TO 6" OTHER) OPEN FLOOR TRENCH (6" TO 24" VOS) (0 TO 6" OTHER) |
| S-6 | ! | · | OPEN FLOOR TRENCH (6" TO 24" VOS) (0 TO 6" OTHER) |
| S-7 ■ | | <u> </u> | OPEN FLOOR TRENCH (6" TO 24" VOS) (0 TO 6" OTHER) |
| S-8 | <u> </u> | | OPEN FLOOR TRENCH (6" TO 24" VOS) (0 TO 6" OTHER) |
| S-9 | | | RUSTED DRUM CARCASS (6" TO 24" VOS) |
| S-10 | | | (0 TO 6" OTHER) DUPLICATE OF S-1 |
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NOTE: Include a site map with the sampling locations identified and highlighted

ATTACHMEDIT T



MONITORING WELLS

ACCESS TO KEYS?

CONVERSION FACTORS (CF): 2"= .16 6"= 1.46 4"= .65 8"= 2.6

| 3.670 | ш 1 | D.T.3.1/77/2000 | DEPTH TO | DEPTH TO | WELL VOLUME | VOLUME TO PURGE | NEW LOCK # | |
|-------|----------------|-----------------|----------|----------|-------------|-------------------|-----------------|----------|
| MW : | F ; | DIAMETER | WATER | BOTTOM | (USE CF) | (3Xs WELL VOLUME) | (IF APPLICABLE) | COMMENTS |
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POTABLE WELLS

OWNER'S NAME

ADDRESS

OWNER NOTIFIED

II. SAMPLING PLAN

PROPOSED DATE(S) OF SAMPLING: 10/13/93

PROPOSED NUMBER OF SAMPLES: 12

AQUEOUS SAMPLE TYPE/NUMBER

(TCL) FIELD BLANK

(VOA) FIELD BLANK 2

TRIP BLANK

GROUND WATER

SURFACE WATER

POTABLE WATER

DUPLICATE

OTHER

TOTAL AQUEOUS 2

NON-AQUEOUS SAMPLE TYPE/NUMBER

SOIL 9

SEDIMENT

DUPLICATE 1

OTHER 1 MSMSD

TOTAL NON-AQUEOUS 10

OA SAMPLES

SAMPLE TYPE/NUMBER MATRIX PARAMETER

TRIP BLANK AQUEOUS VOA

FIELD BLANK 2 AQUEOUS TOTAL USEPA TARGET COMPOUND LIST

ORGANICS & INORGANICS AND/OR VOA

BACKGROUND

PERFORMANCE

EVALUATION NON-AQUEOUS 2,3,7,8-TCDD

SAMPLING EQUIPMENT

TROWELS 10 AUGERS 6 BAILERS

AUGER EXTENSIONS 6 DRIVE RODS DRIVE HEADS

SPLIT SPOONS 9 LAB SPOONS 10 OTHER

ATTACHMENT IT

SAMPLING PROCEDURES:

Lab cleaned and dedicated stainless steel trowels and augers will be used to collect soil samples. Groundwater samples will be collected using lab cleaned and dedicated teflon bailers. All sample containers will be provided by the laboratory prior to sampling.

NJDEPE/Division of Responsible Party Site Remediation sampling procedures and protocol will be followed as per the NJDEPE <u>Field Sampling Procedures</u> <u>Manual</u>, May, 1992.

LABORATORY INFORMATION:

1. NAME: NYTEST ENVIRONMENTAL INC. PARAMETER(S): TCL/TAL/TPHC

ADDRESS: 60 SEAVIEW BLVD.

PORT WASHINGTON, NY 11050

CONTACT: JOHN GASPARI PHONE # 516-625-5500

FEDERAL EXPRESS ACCOUNT #:

2. NAME: PARAMETER(S):

ADDRESS:

CONTACT: PHONE #

FEDERAL EXPRESS ACCOUNT #:

COSTS:

LAB #1:

| SAMPLE TYPE/ TOTAL NUMBER | PARAMETER | COST EACH | TOTAL COST | | | | |
|------------------------------|-------------------|--------------------------------|---------------|--|--|--|--|
| AQUEOUS | TOTAL USEPA TCL | | | | | | |
| 10 NON-AQUEOUS | TOTAL USEPA TCL/T | PHC 1662.50/67.50 | 16,625.00/675 | | | | |
| FIELD BLANK | TOTAL USEPA TCL | | | | | | |
| 2 FIELD BLANK | VOA | 300.00 | 600.00 | | | | |
| TRIP BLANK | VOA | | 50.00 | | | | |
| | | DELIVERY CHARGES PROJECT TOTAL | | | | | |

LAB #2:

AQUEOUS

NON-AQUEOUS

DELIVERY CHARGES
PROJECT TOTAL

ATTAORIVENT 1.7 E

SHIPPING AND HANDLING:

Samples will be chain-of-custody sealed in coolers supplied by the laboratory and returned via express carrier on the same day as sample collection. Aqueous samples will be kept at 4°C at all times.

III. QUALITY ASSURANCE PLAN

PROJECT DESCRIPTION

- A. <u>Objective and scope statement</u>: To characterize contaminants at the site and to determine the hazards these substances may pose to the environment and public health.
- B. <u>Data usage</u>: The data collected on this site inspection will be used to (1) determine if it is a hazardous waste site and, if so (2) prioritize it for future action.
- C. <u>Monitoring design and rationale</u>: The need for sampling was based on information obtained through file reviews and on-site observations during a pre-sampling assessment. The use of field monitoring instruments and visual observations helped to determine sample locations.
- D. <u>Monitoring parameters</u>: Total USEPA Target Compound List organics and inorganics

Other PETROLEUM HYDROCARBONS

PROJECT ORGANIZATION:

DAVID E. TRIGGS CASE COORDINATOR

DAVID E. TRIGGS SAMPLING COORDINATOR

FRANK SORCE SAMPLING MANAGER

KENNETH KLOO PROJECT MANAGER

ROBERT VAN FOSSEN DISCHARGE RESPONSE ELEMENT ACTING ASSISTANT DIRECTOR

FRANK SORCE DISCHARGE RESPONSE ELEMENT QA COORDINATOR

JOSEPH SANGUILLIANO QA PERFORMANCE AUDITOR

MICHAEL MILLER QAPP SYSTEMS AUDITOR

<u>DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION (DRPSR) ORGANIZATIONAL</u>
CHART:

KARL DELANEY DIRECTOR DRPSR

ROBERT VAN FOSSEN ACTING ASSISTANT DIRECTOR DISCHARGE RESPONSE ELEMENT

KENNETH KLOO PROJECT MANAGER MSCA

FRANK SORCE SAMPLING MANAGER

SAMPLING COORDINATOR DAVE TRIGGS

CASE COORDINATOR DAVE TRIGGS

FIELD SAMPLING TEAM

BOB BERETSKY ANDY CYR PATRICIA HICKS JERRY O'DONNELL

DATA QUALITY MEASUREMENTS:

DATA REPRESENTATIVES: A biased sampling approach is used since funding is limited. Areas of contamination are selected by use of field monitoring equipment, visual inspection, eyewitness reports and/or written reports.

DATA COMPARABILITY: The sample data collected on-site is compared to background data collected and to the NJDEPE Soil Cleanup Criteria and Ground Water Quality Standards.

QA/QC SAMPLES:

NON-AQUEOUS MATRIX

One field blank per day is to be collected only when volatile organics constitute a parameter being investigated. The field blank should only be analyzed for volatile organics. The field blank will be prepared by pouring lab demonstrated analyte free water over dedicated stainless steel and/or teflon sample equipment. This sample serves as a quality control of the sample collection procedures and the equipment cleaning process, ensuring contaminants are not being transferred to the sample via the sample collection equipment.

Trip blanks are not required for the non-aqueous matrix.

AQUEOUS MATRIX

One field blank per day is required. The field blank must be analyzed for all the same parameters as samples collected that day.

Trip blanks are required for aqueous sampling events. The trip blank will be filled with demonstrated analyte free water at the lab prior to shipment to the Bureau of Field Operations and will not be opened until it arrives back at the lab with the samples. This sample will serve as a quality control to ensure contaminants are not being transferred between containers during shipments, nor occurring as a result of laboratory contamination.

DOCUMENTATION, DATA REDUCTION AND REPORTING

- A. <u>DOCUMENTATION</u>: Documentation procedures are outlined in the NJDEPE <u>Field Sampling and Procedures Manual</u>, Section 13, May, 1992.
- B. <u>DATA REDUCTION AND REPORTING</u>: Data is reported under State Contract according to the lab deliverable package X-26174 or Regulatory Format.

<u>DATA VALIDATION:</u> The validation of MSCA Grant data is the assigned responsibility of BEMQA; QA Section Chief, Reference BEMQA SOP on data validation.

<u>PERFORMANCE AND SYSTEMS AUDITS:</u> The laboratory is participating in the lab audit program conducted by NJDEPE - OQA.

REPORTS TO MANAGEMENT

- a. Site inspection report filed with Region II EPA (Responsibility of Project Manager).
- b. Sampling Report filed with Sampling Manager on completion of sampling (Case Coordinator).
- c. Data Validation report filed with Sampling Manager and sampling file on completion of data review from BEMQA.
- d. Recommendations for site disposition will be made by case coordinator through the Section Chief and according to the DRPSR Case Management Strategy.

ATTAGRMENT II'

IV. HEALTH AND SAFETY

A. <u>SITE/WASTE CHARACTERISTICS</u>

WASTE TYPE: LIQUID SOLID SLUDGE GAS

CHARACTERISTICS: CORROSIVE IGNITABLE

RADIOACTIVE VOLATILE

TOXIC REACTIVE

UNKNOWN OTHER

DESCRIPTION OF POSSIBLE SAFETY HAZARDS:

1. NUMEROUS PHYSICAL HAZARDS

2. POISON IVY

3. TICKS (LYMES DISEASE)

4. POSSIBLE RESIDUAL ASBESTOS IN SOME AREAS

B. <u>SITE SAFETY PLAN</u>

PERSONAL PROTECTION

LEVEL OF PROTECTION: (PLEASE INDICATE BELOW)

NJDEPE Protocol Level will be employed by all personnel on site unless otherwise demonstrated to be inapplicable from the results of the field survey or changes in field conditions. Upgrading or downgrading will depend upon the factors encountered at the site.

Modifications: Strict contamination avoidance procedures are to be followed at all times. Contamination avoidance procedures include the following precautionary measures.

- Hands, arms and face must be washed before eating, smoking or drinking.
- o No equipment will be removed from the work site until the sampling team leader verifies that the equipment has been satisfactorily decontaminated.
- Clean protective clothing will be used daily, non-disposable equipment such as boots, gloves, goggles and hard hats will be cleaned daily.
- o Gross contact with skin irritants and other contaminants will be avoided by site personnel.
- Where gross contact occurs, immediate flushing of the area with water will be performed.

ATTACHMENT I

MONITORING

Ambient monitoring will be conducted on a continuous basis during all sampling operations. An HNu, OVA or TIP will be employed for organic vapor monitoring and a Biosystems Combustible Gas and 0, Meter will be employed for 0, depletion % LEL Levels. Air quality monitoring action levels, as determined by an organic vapor monitor, are as follows:

| Background | - | Level D | | | | | | |
|----------------|-----|---------|--|--|--|--|--|--|
| * 0-5 PPM | _ | Level C | | | | | | |
| * 5-500 PPM | *** | Level B | | | | | | |
| * 500-1000 PPM | | Level A | | | | | | |

* Concentrations above background

For the combustible gas and 0_2 meter the action levels are as follows:

0₂ - 19.5% or 25%, Leave Site Combustible Gas 25% LEL, Leave Site

For radioactive measurements the action level is as follows:

Greater than 2 mr/hr Leave Site
Above 0.08 mr/hr Proceed with caution

DECONTAMINATION PROCEDURES

Personnel: Wash, rinse boots and gloves in Alconox and water, rinse again paying special attention to the soles of the boots. Remove gloves, remove coveralls, respirator, then surgical gloves. Wash hands and face. Equipment: Equipment will be washed in an Alconox and water mix, rinsed w/tap H₂O, rinsed w/deionized water, rinsed w/acetone, air dry and rinsed w/deionized water.

Investigation - Derived Material Disposal: Disposable protective clothing, respirator cartridges and similar items will be bagged for disposal, and decontamination solutions will be drummed. These drums will be labeled and secured for proper disposal.

Safety Equipment: Portable eyewash stations and first aid kits will be readily available.

Site Access: The hazardous site will be considered a restricted area accessible only to personnel involved in site activities.

C. <u>EMERGENCY INFORMATION</u>

LOCAL RESOURCES

Ambulance: 456-0060

Poison Control Center: 1-800-962-1253

Police: 456-0900

Fire Department: 456-0060

Hospital Name: LADY OF LOURDES HOSPITAL Phone #: 757-3500

NOTE: Attach a map of the closest hospital with an emergency room. Highlight the route to the hospital from the site and include

a written description of the directions.

DIRECTIONS TO HOSPITAL

JERSEY AVENUE TO ROUTE 551 (BROADWAY) NORTH ROUTE 551 TO CARMAN ST. (RIGHT) CARMAN ST. TO HADDON AVE. (RIGHT) HOSPITAL IS ON THE LEFT

EMERGENCY PROCEDURES

Team members will always work in groups of a minimum of two while at the site. Visual contact distance among team members must be maintained at all times.

A backup team member will be ready at all times when site work is ongoing in case of an emergency in the exclusion zone. The person will be dressed out in the same level of protection as people in the exclusion zone.

Under no circumstances will entry into confined spaces be performed by NJDEPE personnel unless approved by the agency safety and health officer.

WORK PLAN APPROVAL SIGNATURES

CASE COORDINATOR

SAMPLING COORDINATOR

SAMPLING MANAGER

PROJECT MANAGER

ATTACHMENT U

and the property of the section

nytest environment inc.

Project No.:

9320470

Log in No. :

18547

P.O. No.

Pending

Date

: Nov. 17, 1993

SUMMARY DATA REPORT PACKAGE FOR

NJDEPE

300 Horizon Center

Robbinsville, NJ 08691

ATTN:

Frank Sorce

REF:

Vanguard Vinyl

LABORATORY

NUMBER

SAMPLE

IDENTIFICATION

TYPE OF

SAMPLE

SEE NEXT PAGE

WE CERTIFY THAT THIS REPORT IS A TRUE REPORT OF RESULTS OBTAINED FROM OUR TESTS OF THIS MATERIAL.

NYS Lab ID. #10195 NJ Cert. #73469

дg

RESPECTFULLY SUBMITTED, NYTEST ENVIRONMENTAL INC.

PENO GIGANTE

EXEC. VICE PRESIDENT

IL THEM TONT IS

Report on sample(s) furnished by client applies to sample(s). Report on sample(s) obtained by us applies only to lot sampled. Information contained herein is not to be used for reproduction except by special permission. Sample(s) will be retained for thirty days maximum after date of report unless specifically requested otherwise by client. In the event that there are portions or parts of sample(s) remaining after Nytest has completed the required tests, Nytest shall have the option of returning such sample(s) to the client at the client's expense.

NYTEST ENVIRONMENTAL Inc.

| LABORATORY NUMBER | SAMPLE IDENTIFICATION | TYPE OF SAMPLE | | | | |
|----------------------|--------------------------|-------------------|--|--|--|--|
| | | | | | | |
| 1854701 | S-1 | Soil | | | | |
| 1854702 | S-2 | Soil | | | | |
| 1854703 | S-3 | Soil | | | | |
| 1854704 | S-4 | Soil | | | | |
| 1854705 | S-5 | Soil | | | | |
| 1854706 | S-6 | Soil | | | | |
| 1854707 | S-7 | Soil | | | | |
| 1854708 | S-8 | Soil | | | | |
| 1854709 | S-9 | Soil | | | | |
| 1854710 | S-10 | Soil | | | | |
| 1854711 | S-5MS | Soil | | | | |
| 1854712 | S-5MSD | Soil | | | | |
| 1854713 | FB-SS | Water | | | | |
| 1854714 | FB-T | Water | | | | |
| | | | | | | |

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nytest environmental,

SDG Narrative

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ATTACHMENT _____

SDG Narrative

Log In No.: 18547

VOLATILE FRACTION

System Monitoring Compounds

The recoveries for Toluene-d8 and Bromofluorobenzene were outside QC limits in sample S-9. The sample was reanalyzed as S-9RE and the recovery for Bromofluorobenzene remained above QC limits. The recovery for Bromofluorobenzene was above QC limits in sample S-5. Since similar results were obtained for sample S-5MS, no further action was necessary. No further action was necessary.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Sample S-5 was utilized for the MS/MSD. Two out of ten spike recoveries and two out of five RPD values were outside advisory QC limits.

Method Blanks

Methylene Chloride was detected in VBLK09. Acetone was detected in VBLKD22. Methylene Chloride and Acetone were detected in VBLKD21. All target compounds detected in the method blanks were detected at concentrations within QC limits.

Calibrations

All initial and continuing calibrations passed QC criteria.

Internal Standards

All retention times were within QC limits. All three area responses were outside QC limits in sample S-9. The sample was reanalyzed as S-9RE. The area response for Chlorobenzene-d5 remained outside QC limits in sample S-9RE. Both sets of data have been submitted. All other area responses fell within acceptable ranges.

Samples

All samples were analyzed as per EPA CLP (3/90). No further analytical problems were encountered.

SDG Narrative

Log In No.: 18547

SEMIVOLATILE FRACTION

<u>Surrogates</u>

Surrogate recoveries for S-9 were outside QC limits due to the high dilution. No further analysis was performed. Recoveries were outside QC limits for S-3 and S-6. The samples were reextracted outside holding time and all recoveries were within QC limits. Both sets of data have been submitted. S-5MSD had recoveries outside QC limits. No further action was required since all recoveries were within QC limits for the unspiked sample and the MS. All other recoveries met QC criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Sample S-5 was utilized for the MS/MSD. Five out of twenty-two spike recoveries and two out of eleven RPDs were outside the advisory QC limits. The unspiked sample, MS and MSD were diluted 1:10 prior to GPC analysis.

Method Blanks

Bis(2-Ethylhexyl)phthalate was detected in SBLK43 and SBLK66 at a concentration within QC limits. Two TICs were detected in SBLK43 and one in SBLK66. One TIC in each blank can be attributed to Aldol condensation.

Calibrations

The initial and continuing calibrations passed QC criteria.

Internal Standards

Samples S-5, S-5RE, S-5MS, S-5MSD, S-8, S-8RE, S-3 and S-6 had area responses outside QC limits. S-3RE and S-6RE had responses within QC limits. No further action was required. All retention times and all other area responses were within QC limits.

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ATTACHMENT 2

SDG Narrative

Log In No.: 18547

SEMIVOLATILE FRACTION CONT. 'D

<u>Samples</u>

Due to the dark and viscous nature of the sample matrix, most samples were diluted before GPC analysis and again by the GC/MS analyst. Bis(2-Ethylhexyl)phthalate exceeded the calibration range of the instrument in S-1 which was initially analyzed at a 1:2 dilution. The sample was reanalyzed at a 1:4 dilution as S-1DL. Samples S-3 and S-6 were reextracted outside holding time due to poor surrogate recoveries. All samples were analyzed as per EPA CLP (3/90). No further problems were encountered.

SDG Narrative

Log In No.: 18547

PESTICIDE/PCB FRACTION

<u>Surrogates</u>

Samples S-2, S-6 and S-7 had TCX recovery outside advisory QC limits on column DB-608. Samples S-3, S-4, S-5 and PBLK72 had TCX recovery outside advisory QC limits on both columns. Samples S-5MS, S-5MSD and S-9 had DCB recovery above advisory QC limits on one column. Samples S-10, S-4, S-7 and S-8 had DCB recovery outside advisory QC limits on both columns. All other recoveries met QC criteria.

Matrix Spike/Matrix Spike Duplicate (MS/MSD)

Sample S-5 was utilized for the MS/MSD. Eight (8) out of twelve (12) spike recoveries and one (1) out of six (6) RPD values were within QC limits for the MS and MSD.

Method Blanks

No target compounds were detected in PBLK09 and PBLK72.

<u>Calibrations</u>

The initial and continuing calibrations passed QC criteria.

Samples

All samples were analyzed as per EPA CLP (3/90). Samples S-3, S-4, S-5, S-5MS, S-5MSD, S-6, S-7 and S-8 were diluted before GPC cleanup due to the viscous nature of the sample extracts. Samples S-3 and S-4 were further diluted 1:3 before GC analysis. Samples S-9 and S10 were diluted 1:3 before GC analysis. Samples S-1 and S-2 were diluted 1:2 and 1:4, respectively, before GC analysis. Dilutions before analysis were based on screening analysis to meet baseline requirements. No additional problems were encountered.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee as verified by the following signature.

Remo Ligante, Exec. VI

| nytest environmental, c | |
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| | ATTACHMENT 22° |

VOLATILE ORGANICS ANALYSIS DATA SHEET

| Lab Name: NYTEST ENV INC | Contract: 9320470 FB-SS |
|-----------------------------------|---|
| Lab Code: NYTEST Case No.: 18547W | SAS No.: SDG No.: |
| Matrix: (soil/water) WATER | Lab Sample ID: <u>1854713</u> |
| Sample wt/vol: 5.0 (g/mL) ML | Lab File ID: <u>K7645</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: not dec | Date Analyzed: 10/18/93 |
| GC Column: CAP ID: 0.530 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| CAS NO. COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q |

| 74-87-3Chloromethane | 10 | ט | |
|-------------------------------------|----|----------------|----------------|
| 74-83-9Bromomethane | 10 | บ | |
| 75-01-4Vinyl Chloride | 10 | ט | |
| 75-00-3Chloroethane | 10 | บ | |
| 75-09-2Methylene Chloride | 10 | В | |
| 67-64-1Acetone | 10 | ט | |
| 75-15-0Carbon Disulfide | 10 | U | |
| 75-35-41,1-Dichloroethene | 10 | Ü | |
| 75-34-31,1-Dichloroethane | 10 | U | |
| 540-59-01,2-Dichloroethene (total) | 10 | ט | |
| 67-66-3Chloroform | 10 | ט | |
| 107-06-21,2-Dichloroethane | 10 | ט | |
| 78-93-32-Butanone | 10 | U | |
| 71-55-61,1,1-Trichloroethane | 10 | U | |
| 56-23-5Carbon Tetrachloride | 10 | U | |
| 75-27-4Bromodichloromethane | 10 | ם ט | |
| 78-87-51,2-Dichloropropage | 10 | U | |
| 10061-01-5cis-1,3-Dichloropropene | 10 | a a | |
| 79-01-6Trichloroethene | 10 | U | |
| 124-48-1Dibromochloromethane | 10 | U | |
| 79-00-51,1,2-Trichloroethane | 10 | ט | |
| 71-43-2Benzene | 10 | ם ט | |
| 10061-02-6trans-1,3-Dichloropropene | 10 | U | |
| 75-25-2Bromoform | 10 | l ⁻ | |
| 108-10-14-Methyl-2-Pentanone | 10 | U U | |
| 591-78-62-Hexanone | 10 | ט | |
| 127-18-4Tetrachloroethene | 10 | ָט ט | |
| 79-34-51,1,2,2-Tetrachloroethane | 10 | 1 | |
| 108-88-3Toluene | | υ | |
| 108-90-7Chlorobenzene | 10 | U | |
| 100-41-4Ethylbenzene | 10 | U | 1 |
| 100-42-5Styrene | 10 | U | |
| 1330-20-7Xylene (total) | 10 | ט | |
| -7 (cocat) | 10 | ָּ | ALIADHEREN . L |

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

| Lab Name: NYTEST ENV INC | FB-SS |
|-----------------------------------|---|
| Lab Code: NYTEST Case No.: 18547W | SAS No.: SDG No.: |
| Matrix: (soil/water) WATER | Lab Sample ID: <u>1854713</u> |
| sample wt/vol: | Lab File ID: <u>K7645</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: not dec | Date Analyzed: 10/18/93 |
| GC Column: CAP ID: 0.530 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume:(uL) | Soil Aliquot Volume:(uL) |
| Number TICs found:0 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L |
| CAS NUMBER COMPOUND NAME | RT EST. CONC. Q |

| Lab Name: NYTEST ENV INC Contra | FB-T |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547W SAS N | Io.: SDG No.: |
| Matrix: (soil/water) WATER | Lab Sample ID: <u>1854714</u> |
| Sample wt/vol: 5.0 (g/mL) ML | Lab File ID: K7644 |
| Level: (low/med) Low | Date Received: 10/14/93 |
| % Moisture: not dec | Date Analyzed: 10/18/93 |
| GC Column: CAP ID: 0.530 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/L</u> Q

| | <u> </u> | |
|-------------------------------------|------------------|-------------|
| 74-87-3Chloromethane | 10 | ט |
| 74-83-9Bromomethane | 10 | ט |
| 75-01-4Vinyl Chloride | 10 | ט |
| 75-00-3Chloroethane | 10 | ט |
| 75-09-2Methylene Chloride | 7 | вЈ |
| 67-64-1Acetone | 2 | J |
| 75-15-0Carbon Disulfide | 10 | ט |
| 75-35-41,1-Dichloroethene | 10 | ט |
| 75-34-31,1-Dichloroethane | _ 10 | ט |
| 540-59-01,2-Dichloroethene (total) | 10 | ט |
| 67-66-3Chloroform | 10 | ט |
| 107-06-21,2-Dichloroethane | 10 | ט |
| 78-93-32-Butanone | 10 | ט |
| 71-55-61,1,1-Trichloroethane | 10 | ט |
| 56-23-5Carbon Tetrachloride | 10 | ับ |
| 75-27-4Bromodichloromethane | 10 | บ |
| 78-87-51,2-Dichloropropane | 10 | ש |
| 10061-01-5cis-1,3-Dichloropropene | 10 | บ |
| 79-01-6Trichloroethene | 10 | U |
| 124-48-1Dibromochloromethane | 10 | [ט |
| 79-00-51,1,2-Trichloroethane | 10 | ט |
| 71-43-2Benzene | 10 | U |
| 10061-02-6trans-1,3-Dichloropropene | 10 | ט |
| 75-25-2Bromoform | 10 | ן ט |
| 108-10-14-Methyl-2-Pentanone | 10 | ט |
| 591-78-62-Hexanone | 10 | U |
| 127-18-4Tetrachloroethene | 10 | U |
| 79-34-51,1,2,2-Tetrachloroethane | 10 | ט |
| 108-88-3Toluene | 10 | ט |
| 108-90-7Chlorobenzene | 10 | U |
| 100-41-4Ethylbenzene | 10 | U |
| 100-42-5Styrene | 10 | U |
| 1330-20-7Xylene (total) | - ₁₀ | U |

Number TICs found: 1

| Lab Name: NYTEST ENV INC Contract | t: <u>9320470</u> |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547W SAS No. | .: SDG No.: |
| Matrix: (soil/water) WATER | Lab Sample ID: <u>1854714</u> |
| Sample wt/vol: 5.0 (g/mL) ML | Lab File ID: <u>K7644</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: not dec | Date Analyzed: 10/18/93 |
| GC Column: CAP ID: 0.530 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume:(uL) | Soil Aliquot Volume:(uL) |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------|-------|------------|---|
| 1. | UNKNOWN SILOXANE | 18.60 | 9 | J |

| Lab Name: NYTEST ENV INC Contract | s-1 |
|--|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854701</u> |
| Sample wt/vol: $5.0 (g/mL) G$ | Lab File ID: <u>D7051</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: not dec. 13 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume: (uL) | soil Aliquot Volume:(uL) |

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| 74-87-3 | | | |
|--|-------------------------------------|---------------|----------------|
| 74-83-9 | 74-87-3Chloromethane | 11 | u |
| 75-01-4 | 74-83-9Bromomethane | ٠١ | 1 |
| 75-00-3 | 75-01-4Vinyl Chloride | ·I | - |
| 75-09-2 | 75-00-3Chloroethane | • 1 | 1 |
| 67-64-1 | 75-09-2Methylene Chloride | | 1 - |
| 75-15-0 | 67-64-1Acetone | •] | 1 |
| 11 U 540-59-01,2-Dichloroethane 11 U 11 U 11 U 12 13 U 140-59-01,2-Dichloroethane 11 U 17-66-3 | 75-15-0Carbon Disulfide | | 1- |
| 11 U 540-59-01,2-Dichloroethane 11 U 11 U 11 U 12 13 U 140-59-01,2-Dichloroethane 11 U 17-66-3 | 75-35-41,1-Dichloroethene | | - |
| 540-59-01,2-Dichloroethene (total) 11 U 67-66-3Chloroform 11 U 107-06-21,2-Dichloroethane 11 U 78-93-32-Butanone 11 U 71-55-61,1,1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5 | 75-34-31,1-Dichloroethane | • [| 1 - |
| 67-66-3 | 540-59-01,2-Dichloroethene (total) | -1 | Ī - |
| 107-06-21, 2-Dichloroethane 11 U 78-93-32-Butanone 11 U 71-55-61, 1, 1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51, 2-Dichloropropane 11 U 10061-01-5cis-1, 3-Dichloropropene 11 U 79-01-6Trichloroethene 11 U 124-48-1Dibromochloromethane 11 U 79-00-51, 1, 2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1, 3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 108-88-3Toluene 11 U 108-90-7 | 67-66-3Chloroform | | I - |
| 78-93-32-Butanone 11 U 71-55-61,1,1-Trichloroethane 11 U 56-23-5Carbon Tetrachloride 11 U 75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethane 11 U 79-00-51,1,2-Trichloroethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 109-41-4Ethylbenzene 11 U | 107-06-21,2-Dichloroethane | | 1 - |
| 71-55-6 | 78-93-32-Butanone | | 1 ~ |
| 56-23-5 | 71-55-61,1,1-Trichloroethane | • | - |
| 75-27-4Bromodichloromethane 11 U 78-87-51,2-Dichloropropane 11 U 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethene 11 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U | 56-23-5Carbon Tetrachloride | | 1 |
| 78-87-51, 2-Dichloropropane 11 U 10061-01-5cis-1, 3-Dichloropropene 11 U 79-01-6Trichloroethene 11 U 124-48-1Dibromochloromethane 11 U 79-00-51, 1, 2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1, 3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51, 1, 2, 2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4 | 75-27-4Bromodichloromethane | | 1 |
| 10061-01-5cis-1,3-Dichloropropene 11 U 79-01-6Trichloroethene 11 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3toluene 11 U 108-90-7chlorobenzene 11 U 100-41-4 | 78-87-51.2-Dichloropropage | 1 | - |
| 79-01-6Trichloroethene 11 U 124-48-1Dibromochloromethane 11 U 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7 | 10061-01-5cis-1.3-Dichloropropene | | 1 |
| 124-48-1 | 79-01-6Trichloroethene | | 1 |
| 79-00-51,1,2-Trichloroethane 11 U 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 124-48-1Dibromochloromethane | 1 | i - |
| 71-43-2Benzene 11 U 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 79-00-51.1.2-Trichloroethane | | 1 |
| 10061-02-6trans-1,3-Dichloropropene 11 U 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 71-43-2Benzene | | - |
| 75-25-2Bromoform 11 U 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 10061-02-6trans-1.3-Dichloropropene | | T |
| 108-10-14-Methyl-2-Pentanone 11 U 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 75-25-2Bromoform | | i " |
| 591-78-62-Hexanone 11 U 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 108-10-14-Methyl-2-Pentanone | | 1 |
| 127-18-4Tetrachloroethene 11 U 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 591-78-62-Heyanone | 1 | - |
| 79-34-51,1,2,2-Tetrachloroethane 11 U 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 127-18-4Tetrachloroethone | | 1 |
| 108-88-3Toluene 11 U 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 79-34-5 | ļ | 1 - |
| 108-90-7Chlorobenzene 11 U 100-41-4Ethylbenzene 11 U 100-42-5 | 108-88-3Toluene | | l - |
| 100-41-4Ethylbenzene 11 U 100-42-5styrene 11 U | 108-90-7Chlorobongono |] == | { ⁻ |
| 100-42-5 | 100-41-4Fthylbongon | | 1 - |
| 1330-20-7Xylene (total) 11 U | 100-42-5styropo | |] ~ |
| 11 U | 1330-20-7 | I | l T |
| | zoov zo-/xyrene (total) | 11 | ט |

| Lab Name: NYTEST ENV INC | S-1 Contract: <u>9320470</u> |
|---|---|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854701</u> |
| Sample wt/vol: $\underline{5.0}$ (g/mL) \underline{G} | Lab File ID: <u>D7051</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. <u>13</u> | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| Number TICs found: 2 | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> |
| | |

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ===== |
|------------|----------------|-------|------------|------------|
| 1. | UNKNOWN ALKANE | 19.93 | 7 | J |
| 2. | UNKNOWN | 22.28 | 9 | J |

Q

| Lab Name: NYTEST ENV INC Contrac | t: <u>9320470</u> |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No | .: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854710</u> |
| sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7060</u> |
| Level: (low/med) Low | Date Received: 10/14/93 |
| % Moisture: not dec. 18 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume:(uL) | Soil Aliquot Volume:(uL) |
| | |

COMPOUND

CAS NO.

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

| 74-87-3Chloromethane | 12 | U |
|-------------------------------------|--------|--------|
| 74-83-9Bromomethane | - 12 | ט ט |
| 75-01-4Vinyl Chloride | - 12 | מ |
| 75-01-4Vinyl Chioride | 12 | ۳ |
| 75-09-2Methylene Chloride | - 15 | В |
| 67-64-1Acetone | - 7 | BJ |
| 75-15-0Carbon Disulfide | 12 | ט |
| 75-35-41,1-Dichloroethene | 12 | ט |
| 75-34-31,1-Dichloroethane | - 12 | ט |
| 540-59-01,2-Dichloroethene (total) | _ | מ |
| 67-66-3Chloroform | 12 | מ |
| 107-06-21,2-Dichloroethane | 12 | מ |
| 78-93-32-Butanone | - | ט |
| | 12 | 1 - |
| 71-55-61,1,1-Trichloroethane | | ט |
| 56-23-5Carbon Tetrachloride | . 12 | U |
| 75-27-4Bromodichloromethane | . 12 | ט |
| 78-87-51,2-Dichloropropane | . 12 | ש |
| 10061-01-5cis-1,3-Dichloropropene | . 12 | ן ט |
| 79-01-6Trichloroethene | . 12 | ט |
| 124-48-1Dibromochloromethane | | ַ ט |
| 79-00-51,1,2-Trichloroethane | . 12 | ַ |
| 71-43-2Benzene | . 12 | ט |
| 10061-02-6trans-1,3-Dichloropropene | 12 | ט |
| 75-25-2Bromoform_ | 12 | ប |
| 108-10-14-Methyl-2-Pentanone | 12 | ט |
| 591-78-62-Hexanone | 12 | ט |
| 127-18-4Tetrachloroethene | 12 | ט |
| 79-34-51,1,2,2-Tetrachloroethane | 12 | บ |
| 108-88-3Toluene | 12 | ט |
| 108-90-7Chlorobenzene | 12 | ט |
| 100-41-4Ethylbenzene | 12 | บ |
| 100-42-5Styrene | 1 12 | U |
| 1330-20-7Xylene (total) | 12 | U |
| * \ | - | 1 |

Matrix: (soil/water) SOIL

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| Lab | Name: | NYTEST EN | / INC | | | Contract: | 9320470 | | s-10 |
|-----|-------|-----------|-------|------|-------------|-----------|---------|-------------|------|
| Lab | Code: | NYTEST | Case | No.: | 18547 | SAS No.: | | SDG | No.: |

Lab Sample ID: 1854710 Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7060

Level: (low/med) Low Date Received: 10/14/93

% Moisture: not dec. 18 Date Analyzed: 10/19/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: Number TICs found: 3 (ug/L or ug/Kg) UG/KG

| Lab Name: NYTEST ENV INC Contrac | s-2 |
|--|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | o.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854702</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7052</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: not dec. 14 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |

CONCENTRATION UNITS:

| CAS NO. | COMPOUND | (ug/L or ug/K | g) <u>UG/KG</u> | Q |
|------------|-------------------|---------------|-----------------|--------|
| 74-87-3 | Chloromethane | | 12 | U |
| 74-83-9 | Bromomethane | | 12 | บ |
| 75-01-4 | Vinyl Chloride | | 12 | ן ט |
| 75-00-3 | Chloroethane | | 12 | ט |
| 75-09-2 | Methylene Chlori | de | 6 | вЈ |
| 67-64-1 | Acetone | | 20 | В |
| 75-15-0 | Carbon Disulfide | | 12 | ט |
| 75-35-4 | 1,1-Dichloroethe | ne | 12 | σ |
| 75-34-3 | 1,1-Dichloroetha | ne | 12 | υ |
| 540-59-0 | 1,2-Dichloroethe | ne (total) | 12 | ט |
| 67-66-3 | Chloroform | | 12 | ט |
| 107-06-2 | 1,2-Dichloroetha | ne | 12 | ט |
| 78-93-3 | 2-Butanone | | 12 | ט |
| 71-55-6 | 1,1,1-Trichloroe | thane | 12 | ש |
| 56-23-5 | Carbon Tetrachlo | ride | 12 | ט |
| 75-27-4 | Bromodichloromet | nane | 12 | ט |
| 78-87-5 | 1,2-Dichloropropa | ane | 12 | ן ט |
| 10061-01-5 | cis-1,3-Dichloro | propene | 12 | ט |
| 79-01-6 | Trichloroethene | | 12 | ט |
| 124-48-1 | Dibromochlorometl | nane | 12 | ט |
| 79-00-5 | 1,1,2-Trichloroet | hane | 12 | ט |
| 71-43-2 | Benzene | | 12 | U |
| 10061-02-6 | trans-1,3-Dichlor | opropene | 12 | U |
| 75-25-2 | Bromoform | | 12 | ט |
| 108-10-1 | 4-Methyl-2-Pentai | none | 12 | ט |
| 591-78-6 | 2-Hexanone | | 12 | ט |
| 127-18-4 | Tetrachloroethene | | 12 | ט |
| 79-34-5 | 1,1,2,2-Tetrachlo | roethane | 12 | U |
| 108-88-3 | Toluene | | 12 | ט |
| 108-90-7 | Chlorobenzene | | 12 | U |
| 100-41-4 | Ethylbenzene | | 12 | u u |
| 100-42-5 | Styrene | | 12 | ם מ |
| 1330-20-7 | Xylene (total) | | 12 | Ü |
| | | | ± 4. | |
| | | | | 1 |

| s-2 | |
|-----|--|
|-----|--|

| Lab Name: NYTEST ENV INC | contract: <u>9320470</u> |
|----------------------------------|---|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854702</u> |
| sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7052</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. 14 | Date Analyzed: <u>10/19/93</u> |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| Number TICs found: 2 | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> |

| CAS NUMBER | COMPOUND NAME | RT ====== | EST. CONC. | Q ===== |
|------------|---------------|--------------|------------|------------|
| 1. | UNKNOWN | 18.33 | 6 | J |
| 2. | UNKNOWN | 19.68 | 8 | J |
| | | | | |

| Lab Name: NYTEST ENV INC Contract | s-3 st: <u>9320470</u> |
|---|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS NO | o.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: D7053 |
| Level: (low/med) LOW | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. 24 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| CONC | ENTRATION UNITS: |

| CAS NO. | COMPOUND | (ug/L or | ug/Kg) | UG/KG | Q |
|------------|-------------------|-----------|----------|-------|----------------|
| 74-87-3 | Chloromethane | | | 13 | ט |
| 74-83-9 | Bromomethane | | | 13 | ט |
| 75-01-4 | Vinyl Chloride | | | 13 | ט |
| 75-00-3 | Chloroethane | | | 13 | ט |
| 75-09-2 | Methylene Chloric | le | | 5 | вЈ |
| 67-64-1 | Acetone | | | 13 | ט |
| 75-15-0 | Carbon Disulfide | | | 13 | U |
| 75-35-4 | 1,1-Dichloroether | ie | | 13 | ט |
| 75-34-3 | 1,1-Dichloroethar | 1e | ı | 13 | U |
| 540-59-0 | 1,2-Dichloroether | e (total) | | 47 | |
| 67-66-3 | Chloroform | | | 13 | ט |
| 107-06-2 | 1,2-Dichloroethar | ıe | | 13 | บ |
| 78-93-3 | 2-Butanone | | | 13 | ן ט |
| 71-55-6 | 1,1,1-Trichloroet | hane | - | 13 | U |
| 56-23-5 | Carbon Tetrachlor | ide | | 13 | บ |
| 75-27-4 | Bromodichlorometh | ane | | 13 | ט |
| 78-87-5 | 1,2-Dichloropropa | ine | 1 | 13 | ט |
| 10061-01-5 | cis-1,3-Dichloror | ropene | | 13 | ט |
| 79-01-6 | Trichloroethene | | ł | 140 | |
| 124-48-1 | Dibromochlorometh | ane | | 13 | ש |
| 79-00-5 | 1,1,2-Trichloroet | hane | _ | 13 | U |
| 71-43-2 | Benzene | | 1 | 13 | ט |
| 10061-02-6 | trans-1,3-Dichlor | opropene | _ | 13 | U |
| 75-25-2 | Bromoform | | | 13 | บ |
| 108-10-1 | 4-Methvl-2-Pentan | one | | 13 | บ |
| 591-78-6 | 2-Hexanone | | - | 13 | บ |
| 12/-18-4 | Tetrachloroethene | | į | 220 | 1 |
| 79-34-5 | 1,1,2,2-Tetrachlo | roethane | | 13 | ן _ט |
| 108-88-3 | Toluene | | | 2 | J |
| 108-90-7 | Chlorobenzene | | - | 13 | ט |
| 100-41-4 | Ethylbenzene | | | 13 | ש |
| 100-42-5 | styrene | | | 13 | U |
| 1330-20-7 | Xylene (total) | | | 13 | U |
| | | | - | 13 | ١ |
| | | | | | l ——— |

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Number TICs found: 4

EPA SAMPLE NO.

| Lab Name: NYTEST ENV INC Contract | s-3 t: <u>9320470</u> |
|--|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | .: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: $5.0 (g/mL) G$ | Lab File ID: <u>D7053</u> |
| Level: (low/med) <u>LOW</u> | Date Received: 10/14/93 |
| % Moisture: not dec. 24 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| | |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

| CAS NUMBER 1. 2. | COMPOUND NAME | RT ======= 8.42 | EST. CONC. | д |
|-------------------|--|-------------------------|----------------|-------|
| 3. | UNKNOWN SILOXANE UNKNOWN UNKNOWN | 19.92 20.80 21.58 | 14 13 12 | J |

| Lab Name: NYTEST ENV INC Contract | s-4 : 9320470 |
|--|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | .: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854704</u> |
| Sample wt/vol: | Lab File ID: <u>D7054</u> |
| Level: (low/med) Low | Date Received: 10/14/93 |
| % Moisture: not dec. 36 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| CONCE | ENTRATION UNITS: |

| CAS NO. | COMPOUND | (ug/L or ug/ | Kg) <u>UG/KG</u> | Q |
|-------------|---------------------|--------------|------------------|----|
| | Chloromethane | | 16 | ט |
| 74-83-9 | Bromomethane | | 16 | ט |
| 75-01-4 | Vinyl Chloride | | 16 | ט |
| | Chloroethane | | 16 | ט |
| 75-09-2 | Methylene Chloride | | 10 | вЈ |
| 67-64-1 | Acetone | | 8 | вЈ |
| | Carbon Disulfide | | 16 | ט |
| 75-35-4 | 1,1-Dichloroethene | | 16 | ប |
| 75-34-3 | 1,1-Dichloroethane | | 16 | ט |
| | 1,2-Dichloroethene | (total) | 16 | ט |
| | Chloroform | | 16 | ט |
| 107-06-2 | 1,2-Dichloroethane | ! | 16 | บ |
| 78-93-3 | 2-Butanone | | 16 | ט |
| 71-55-6 | 1,1,1-Trichloroeth | ane | 16 | ט |
| 56-23-5 | Carbon Tetrachlori | de | 16 | ט |
| | Bromodichlorometha | | 16 | U |
| 78-87-5 | 1,2-Dichloropropan | le | 16 | บ |
| 10061-01-5- | cis-1,3-Dichloropr | opene | 16 | ט |
| 79-01-6 | Trichloroethene | - | 16 | ט |
| | Dibromochlorometha | ne | 16 | ט |
| 79-00-5 | 1,1,2-Trichloroeth | ane | 16 | U |
| | Benzene | | 16 | ט |
| 10061-02-6- | trans-1,3-Dichloro | propene | 16 | U |
| 75-25-2 | Bromoform | | 16 | υ |
| | 4-Methyl-2-Pentance | ne | 16 | ט |
| | 2-Hexanone | | 16 | U |
| | Tetrachloroethene | | 16 | Ū |
| | 1,1,2,2-Tetrachlor | cethane | 16 | ט |
| 108-88-3 | Toluene | | 2 | J |
| | Chlorobenzene | | 16 | ט |
| 100-41-4 | Ethylbenzene | | 16 | ט |
| 100-42-5 | Styrene | | 16 | ט |
| 1330-20-7 | Xylene (total) | | 16 | ט |
| | 1 20110 (00001) | | 10 | |
| | | | | |

0000020 3/90

| Lab Name: NYTEST ENV INC | Contract: 9320470 S-4 |
|-------------------------------------|---|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854704</u> |
| Sample wt/vol: 5.0 (g/mL) | Lab File ID: <u>D7054</u> |
| Level: (low/med) <u>Low</u> | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. <u>36</u> | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| Number TICs found:2 | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> |

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ===== |
|------------|--------------------------|----------------|------------|------------|
| 1. 2. | UNKNOWN UNKNOWN SILOXANE | 19.85 21.10 | 13 47 | J J |

| Lab Name: NYTEST ENV INC | S-5 Contract: 9320470 | |
|---|-------------------------------|--|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: | |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854705</u> | |
| Sample wt/vol: $\underline{5.0}$ (g/mL) \underline{G} | Lab File ID: <u>D7055</u> | |

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: not dec. 37 Date Analyzed: 10/19/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

COMPOUND

CAS NO.

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) <u>UG/KG</u> Q

74-87-3-----Chloromethane 74-83-9-----Bromomethane 16 U 75-01-4-----Vinyl Chloride 16 U 75-00-3-----chloroethane 16 U 75-09-2-----Methylene Chloride_ 30 В 67-64-1-----Acetone 39 75-15-0-----Carbon Disulfide 16 U 75-35-4----1,1-Dichloroethene 16 U 75-34-3-----1,1-Dichloroethane_ 16 U 540-59-0----1,2-Dichloroethene (total)___ 4 J 67-66-3-----chloroform 16 U 107-06-2----1,2-Dichloroethane 16 U 78-93-3----2-Butanone 16 U 71-55-6----1,1,1-Trichloroethane 16 U 56-23-5-----Carbon Tetrachloride____ 16 U 75-27-4-----Bromodichloromethane 16 U 78-87-5----1,2-Dichloropropane_ 16 U 10061-01-5----cis-1,3-Dichloropropene 16 U 79-01-6----Trichloroethene 19 124-48-1-----Dibromochloromethane 16 79-00-5-----1,1,2-Trichloroethane 16 U 71-43-2----Benzene 16 U 10061-02-6----trans-1,3-Dichloropropene_ 16 U 75-25-2----Bromoform 16 U 108-10-1----4-Methyl-2-Pentanone 16 บ 591-78-6----2-Hexanone 16 U 127-18-4-----Tetrachloroethene 16 U 79-34-5----1,1,2,2-Tetrachloroethane_ 16 lυ 108-88-3-----Toluene 66 108-90-7-----chlorobenzene_ 16 U 100-41-4----Ethylbenzene 16 U 100-42-5----styrene 16 U 1330-20-7------Xylene (total)__ U

| | | | S-5 |
|-----------|----------------|--------------------------|-----|
| Lab Name: | NYTEST ENV INC | Contract: <u>9320470</u> | |

Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1854705

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7055

Level: (low/med) Low

% Moisture: not dec. 37 Date Analyzed: 10/19/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(uL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Date Received: <u>10/14/93</u>

Number TICs found: 10

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---------|------------|-------|
| ======================================= | ======================================= | ======= | ========= | ===== |
| 1. | UNKNOWN ALKANE | 18.23 | 200 | J |
| 2. | UNKNOWN | 18.95 | 250 | J |
| 3. | UNKNOWN ALKANE | 19.47 | 280 | J |
| 4. | UNKNOWN CYCLOALKANE | 19.67 | 260 | J |
| 5. | UNKNOWN ALKANE | 19.80 | 410 | J |
| 6. | UNKNOWN ALKANE | 20.32 | 190 | J |
| 7. | UNKNOWN | 20.67 | 510 | J |
| 8. | UNKNOWN CYCLOALKANE | 21.28 | 290 | J |
| 9. | UNKNOWN ALKANE | 21.42 | 320 | J |
| 10. | UNKNOWN | 22.15 | 740 | J |
| 1. | | | | |

| Lab Name: NYTEST ENV INC C | s-6 ontract: 9320470 |
|----------------------------------|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854706</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7071</u> |
| Level: (low/med) LOW | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. 34 | Date Analyzed: 10/20/93 |
| GC Column: PACK TD: 2.00 (mm) | Dilution Factor: 1.0 |

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

Soil Extract Volume: _____(uL) Soil Aliquot Volume: ____(uL)

| | | , | |
|------------|----------------------------|----|--------|
| 74-87-3 | Chloromethane | 15 | ָ ט |
| 74-83-9 | Bromomethane | 15 | ט |
| 75-01-4 | Vinyl Chloride | 15 | ט |
| 75-00-3 | | 15 | ט |
| 75-09-2 | Methylene Chloride | 6 | J |
| | Acetone | 15 | ט |
| | Carbon Disulfide | 15 | ט |
| 75-35-4 | 1,1-Dichloroethene | 15 | ט |
| 75-34-3 | 1,1-Dichloroethane | 15 | ט |
| | 1,2-Dichloroethene (total) | 15 | ט |
| 67-66-3 | | 15 | ט |
| 107-06-2 | 1,2-Dichloroethane | 15 | ט |
| 78-93-3 | 2-Butanone | 15 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 15 | ט |
| 56-23-5 | Carbon Tetrachloride | 15 | ប |
| 75-27-4 | Bromodichloromethane | 15 | U |
| 78-87-5 | 1,2-Dichloropropane | 15 | ט |
| 10061-01-5 | cis-1,3-Dichloropropene | 15 | ן ט |
| | Trichloroethene | 15 | ប |
| 124-48-1 | Dibromochloromethane | 15 | ט |
| | 1,1,2-Trichloroethane | 15 | ט |
| 71-43-2 | Benzene | 15 | ט |
| 10061-02-6 | trans-1,3-Dichloropropene | 15 | U |
| 75-25-2 | Bromoform | 15 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 15 | ט |
| 591-78-6 | | 15 | U |
| | Tetrachloroethene | 15 | ט |
| | 1,1,2,2-Tetrachloroethane | 15 | ט |
| 108-88-3 | | 15 | ט |
| | Chlorobenzene | 15 | ט |
| 100-41-4 | Ethylbenzene | 15 | ប |
| 100-42-5 | Styrene | 15 | บ |
| | Xylene (total) | 15 | ט |
| | | | l |

| s-6 |
|-----|
|-----|

| | | | s-6 |
|----------|----------------|--------------------------|-----|
| Lab Name | NYTEST ENV INC | Contract: <u>9320470</u> | |

Lab Code: <u>NYTEST</u> Case No.: <u>18547</u> SAS No.: _____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854706</u>

Sample wt/vol: $\underline{5.0}$ (g/mL) \underline{G} Lab File ID: $\underline{D7071}$

Date Received: 10/14/93Level: (low/med) LOW

% Moisture: not dec. 34 Date Analyzed: 10/20/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(uL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>

Number TICs found: 10

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ===== |
|------------|----------------|-------|------------|------------|
| 1. | UNKNOWN | 10.37 | 50 | J |
| 2. | UNKNOWN ALKANE | 16.03 | 26 | J |
| 3. | UNKNOWN | 16.32 | 25 | J |
| 4. | UNKNOWN | 16.55 | 58 | J |
| 5. | UNKNOWN | 17.93 | 44 | J |
| 6. | UNKNOWN | 18.43 | 66 | J |
| 7. | UNKNOWN | 19.80 | 70 | J |
| 8. | UNKNOWN | 20.42 | 15 | J |
| 9. | UNKNOWN | 21.20 | 15 | J |
| 10. | UNKNOWN | 22.08 | 16 | J |

| Lab Name: NYTEST ENV INC CO | ontract: <u>9320470</u> |
|------------------------------------|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 S | SAS No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854707</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7057</u> |
| Level: (low/med) LOW | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. 51 | Date Analyzed: 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |
| | CONCENTRATION UNITS: |

| CAS NO. | COMPOUND (ug/L or u | ıg/Kg) <u>UG/KG</u> | Q |
|------------|----------------------------|---------------------|----------------|
| 74-87-3 | Chloromethane | 20 | ט |
| 74-83-9 | Bromomethane | | ָּט |
| 75-01-4 | Vinyl Chloride | | ט |
| 75-00-3 | Chloroethane | 20 | ט |
| 75-09-2 | Methylene Chloride | 35 | В |
| 67-64-1 | Acetone | 15 | вЈ |
| 75-15-0 | Carbon Disulfide | 20 | ט |
| 75-35-4 | 1,1-Dichloroethene | 20 | ט |
| 75-34-3 | 1,1-Dichloroethane | _ 20 | ט |
| 540-59-0 | 1,2-Dichloroethene (total) | 20 | ט |
| | Chloroform | 20 | ט |
| 107-06-2 | 1,2-Dichloroethane | _ 20 | U |
| 78-93-3 | 2-Butanone | 20 | ט |
| 71-55-6 | 1,1,1-Trichloroethane | 20 | ן ט |
| 56-23-5 | Carbon Tetrachloride | 20 | ן ט |
| 75-27-4 | Bromodichloromethane | 20 | ט |
| 78-87-5 | 1,2-Dichloropropane | 20 | บ |
| 10061-01-5 | cis-1,3-Dichloropropene | 20 | ט |
| 79-01-6 | Trichloroethene | 20 | ប |
| 124-48-1 | Dibromochloromethane | 20 | υ |
| 79-00-5 | 1,1,2-Trichloroethane | 20 | ן ט |
| 71-43-2 | Benzene | 20 | ן ט |
| 10061-02-6 | trans-1,3-Dichloropropene | 20 | ן ט |
| 75-25-2 | Bromoform | 20 | ן מ |
| 108-10-1 | 4-Methyl-2-Pentanone | 20 | ט |
| 591-78-6 | 2-Hexanone | 20 | ט |
| 127-18-4 | Tetrachloroethene | 20 | ט |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | _ 20 | ט |
| 108-88-3 | Toluene | 7 | J |
| 108-90-7 | Chlorobenzene | 7 20 | ט |
| 100-41-4 | Ethylbenzene | - 20 | ן ט |
| 100-42-5 | Styrene | l 20 | ָ ^ט |
| 1330-20-7 | Xylene (total) | 20 | Ü |
| | | | . |
| | | | |

Number TICs found: 1

| Lab Name: NYTEST ENV INC Contract | : 9320470 | 5-7 |
|--|-----------------|-----------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG | No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: | 1854707 |
| Sample wt/vol: $5.0 (g/mL) G$ | Lab File ID: | D7057 |
| Level: (low/med) <u>LOW</u> | Date Received: | 10/14/93 |
| % Moisture: not dec. <u>51</u> | Date Analyzed: | 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor | :1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Vo | lume:(uL) |
| | | |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

| | | | · · · · · · · · · · · · · · · · · · · | r |
|---|---|---------|---------------------------------------|-------|
| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
| ======================================= | ======================================= | ======= | ======== | ===== |
| 1. | UNKNOWN | 22.05 | 13 | J |
| 1 | | | | |

| Lab Name: NYTEST ENV INC | S-8 Contract: <u>9320470</u> | |
|----------------------------------|---------------------------------|-----|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: | |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854708</u> | |
| Sample wt/vol: $5.0 (g/mL) G$ | Lab File ID: <u>D7072</u> | |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> | |
| % Moisture: not dec. 32 | Date Analyzed: 10/20/93 | |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 | |
| Soil Extract Volume: (uL) | soil Aliquot Volume:(u | ıL) |
| CAC NO | CONCENTRATION UNITS: | |

| CAS NO. | | (ug/L or ug/ | | Q | |
|-----------------------|----------------------|--------------|---------|-----|-------------------|
| 74-87-3 | Chloromethane | | | | _1 |
| 74-83-9 | Bromomethane | | 15 | Ū | 1 |
| 75-01-4 | Vinvl Chloride | | 15 | U | 1 |
| /5-00-3 | Chloroethano | | . 15 | ט | |
| 75-09-2 | Methylene Chloride | | 15 | U | |
| 0/-04-1 | Acetone | | 5 | J | |
| 75-15-0 | Carbon Digulfide | | 7 | BJ | |
| /5-35-4 | 1.1-Dichloroothone | | 15 | U | |
| /3-34-3 | l.l-Dichlorooth | | 15 | ט | |
| 340-39-0 | 1,2-Dichloroethere | (+ c+ c 1) | 15 | ט | |
| 01-00-3 | ====CBlOroform | (cocar) | 15 | Ü | 1 |
| 107-06-2 | 1.2-Dichloroethane | | 15 | ט | j |
| /8-93-3 | 2-Butanone | | 15 | ט | |
| 71-55-6 | 1.1 1-Trichlorosther | | 15 | ט | |
| 20-23-2 | Carbon Totrochlowia | | 15 | ט | |
| /3-2/-4 | Bromodichloromothess | <u>'</u> | 15 | ט | |
| 78-87-5 | 1,2-Dichloropropane_ | ·——— | 15 | ט | |
| 10061-01-5 | cis-1,3-Dichloroprop | | 15 | ט | 1 |
| 79-01-6 | Trichloroethene | ene | 15 | U | 1 |
| 124-48-1 | Dibromochloromethane | | 15 | ט | |
| 79-00-5 | 1,1,2-Trichloroethan | | 15 | ט | |
| 71-43-2 | | e | 15 | U | |
| 10061-02-6 | trans-1,3-Dichloropr | | 15 | ט | |
| 75-25-2 | Bromoform | opene | 15 | ט | j |
| 108-10-1 | 4-Methyl-2-Pentanone | | 15 | บ | ł |
| 591-78-6 | 2-Hexanone | | 15 | U | |
| 127-18-4 | Tetrachloroethene | | 15 | ַ | |
| 79-34-5 | 1 1 2 2 - | | 15 | ט | |
| 108-88-3 | 1,1,2,2-Tetrachloroe | thane | 15 | ן מ | |
| 108-90-7 | rotuene | | 2 | J | |
| 00-41-4 | Chlorobenzene | | 15 | บ | |
| 00-42-5 | Ethylbenzene | | 15 | บ | |
| .00-42-5 .330-20-7 | styrene_ | | 15 | ט | " |
| | Xylene (total) | | 15 | ט | |
| | FORM I VO | | 0000028 | | TACHMENI'. '90 |

| Lab Name: NYTEST ENV INC Contract | :: <u>9320470</u> |
|--|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854708</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7072</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: not dec. 32 | Date Analyzed: 10/20/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor:1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Volume:(uL) |

CONCENTRATION UNITS:

Number TICs found: 4 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ===== |
|------------|------------------|-------|------------|------------|
| 1. | UNKNOWN SILOXANE | 15.75 | 17 | J |
| 2. | UNKNOWN ALKANE | 18.28 | 10 | J |
| 3. | UNKNOWN | 19.82 | 21 | J |
| 4. | UNKNOWN SILOXANE | 21.10 | 25 | J |
| | | | | |

COMPOUND

| Lab Name: NYTEST ENV INC Contract | : 9320470 | s-9 |
|--|-----------------|-----------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | .: SDG | No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: | 1854709 |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: | D7059 |
| Level: (low/med) LOW | Date Received: | 10/14/93 |
| % Moisture: not dec21 | Date Analyzed: | 10/19/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor | :1.0 |
| Soil Extract Volume: (uL) | Soil Aliquot Vo | lume:(uL) |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

| 74-87-3Chloromethane | 13 | U |
|-------------------------------------|----|------|
| 74-83-9Bromomethane | 13 | U |
| 75-01-4Vinyl Chloride | 13 | U |
| 75-00-3Chloroethane | 13 | U |
| 75-09-2Methylene Chloride | 31 | В |
| 67-64-1Acetone | 13 | |
| 75-15-0Carbon Disulfide | 13 | σ |
| 75-35-41,1-Dichloroethene | 13 | U |
| 75-34-31,1-Dichloroethane | 13 | ט |
| 540-59-01,2-Dichloroethene (total) | 13 | ט |
| 67-66-3Chloroform | 13 | ט |
| 107-06-21,2-Dichloroethane | 13 | ט |
| 78-93-32-Butanone | 13 | ט |
| 71-55-61,1,1-Trichloroethane | 13 | ט |
| 56-23-5Carbon Tetrachloride | 13 | U |
| 75-27-4Bromodichloromethane | 13 | ט |
| 78-87-51,2-Dichloropropane | 13 | ט |
| 10061-01-5cis-1,3-Dichloropropene | 13 | ט |
| 79-01-6Trichloroethene | 13 | U |
| 124-48-1Dibromochloromethane | 13 | ט |
| 79-00-51,1,2-Trichloroethane | 13 | U |
| 71-43-2Benzene | 13 | Ü |
| 10061-02-6trans-1,3-Dichloropropene | 13 | ט |
| 75-25-2Bromoform | 13 | Ü |
| 108-10-14-Methyl-2-Pentanone | 13 | ט |
| 591-78-62-Hexanone | 13 | ט |
| 127-18-4Tetrachloroethene | 13 | ט |
| 79-34-51,1,2,2-Tetrachloroethane | 13 | U U |
| 108-88-3Toluene | 19 | |
| 108-90-7Chlorobenzene | 13 | ן די |
| 100-41-4Ethylbenzene | 13 | ט |
| 100-42-5Styrene | 13 | ן ט |
| 1330-20-7Xylene (total) | 13 | u |

CAS NO.

| Tah | Mama. | | | | | | S-9 |
|-----|-------|--------|-----|-----|-----------|---------|-----|
| nan | Name: | NYTEST | ENV | INC | Contract: | 9320470 | |

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854709</u>

Sample wt/vol: 5.0 (g/mL) G Lab File ID: D7059

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: not dec. 21 Date Analyzed: 10/19/93

GC Column: PACK ID: 2.00 (mm) Dilution Factor: 1.0

Soil Extract Volume: ____(uL) Soil Aliquot Volume: ____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 3

| 2. | COMPOUND NAME | RT ======= 4.90 14.70 19.30 | EST. CONC. | Q ===== J J J |
|----|---------------|---|----------------|---------------------------|
| | | | | |

COMPOUND

CAS NO.

| | S-9RE | |
|---|-------|--|
| ı | | |

Q

| Lab Name: NYTEST ENV INC Contr | act: 9320470 |
|--------------------------------------|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854709</u> |
| Sample wt/vol: 5.0 (g/mL) G | Lab File ID: <u>D7073</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: not dec. 21 | Date Analyzed: 10/20/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (uL) | soil Aliquot Volume:(uL |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

74-87-3-----Chloromethane 13 U 74-83-9----Bromomethane 13 U 75-01-4-----Vinyl Chloride U 13 75-00-3-----Chloroethane 13 U 75-09-2----Methylene Chloride J 6 67-64-1-----Acetone 8 BJ 75-15-0-----Carbon Disulfide 13 U 75-35-4----1,1-Dichloroethene 13 U 75-34-3-----1,1-Dichloroethane 13 U 540-59-0----1,2-Dichloroethene (total) 13 U 67-66-3-----Chloroform 13 U 107-06-2----1, 2-Dichloroethane 13 U 78-93-3----2-Butanone 13 U 71-55-6----1,1,1-Trichloroethane 13 U 56-23-5-----Carbon Tetrachloride 13 U 75-27-4----Bromodichloromethane 13 U 78-87-5-----1,2-Dichloropropane 13 U 10061-01-5----cis-1,3-Dichloropropene 13 U 79-01-6----Trichloroethene 13 U 124-48-1-----Dibromochloromethane 13 U 79-00-5----1,1,2-Trichloroethane 13 U 71-43-2----Benzene 13 U 10061-02-6----trans-1,3-Dichloropropene 13 U 75-25-2----Bromoform U 13 108-10-1-----4-Methyl-2-Pentanone U 13 591-78-6----2-Hexanone 13 U 127-18-4----Tetrachloroethene 13 U 79-34-5----1,1,2,2-Tetrachloroethane_ 13 U 108-88-3----Toluene 11 J 108-90-7-----Chlorobenzene 13 U 100-41-4----Ethylbenzene 13 U 100-42-5----Styrene_ 13 U 1330-20-7-----Xylene (total) 13 U

| | S-9RE |
|---------|-------|
| 9320470 | |

| Lab Name: NYTEST ENV INC Contrac | t: <u>9320470</u> |
|---|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No | .: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854709</u> |
| Sample wt/vol: $\underline{5.0}$ (g/mL) \underline{G} | Lab File ID: <u>D7073</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: not dec. 21 | Date Analyzed: 10/20/93 |
| GC Column: PACK ID: 2.00 (mm) | Dilution Factor: 1.0 |
| Soil Extract Volume: (UT) | Coil aliment walnus |

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: ____(uL)

Number TICs found: __5

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

| CAS NUMBER | ======= | COMPOUND | NAME | RT ======= | EST. CONC. | Q ===== |
|------------|---------|----------|------|---------------|------------|------------|
| 1. | UNKNOWN | | | 18.52 | 11 | J |
| 2. | UNKNOWN | | | 19.98 | 49 | J |
| 3. | UNKNOWN | SILOXANE | | 21.10 | 25 | J |
| 4. | UNKNOWN | | | 22.22 | 10 | J |
| 5. | UNKNOWN | | | 22.30 | 9 | J |
| | | | | | | |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CAS NO. COMPOUND CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG Q

| | T | T |
|---------------------------------------|------|-------|
| 108-95-2Phenol | 760 | ט |
| 111-44-4bis(2-Chloroethyl)Ether | 760 | U |
| 95-57-82-Chlorophenol | 760 | ט |
| 541-73-11,3-Dichlorobenzene | 760 | U |
| 106-46-71,4-Dichlorobenzene | 760 | ט |
| 95-50-11,2-Dichlorobenzene | 760 | U |
| 95-48-72-Methylphenol | 760 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane)_ | 760 | U |
| 106-44-54-Methylphenol | 760 | ט |
| 621-64-7N-Nitroso-di-n-propylamine_ | 760 | ซ |
| 67-72-1Hexachloroethane | 760 | ש |
| 98-95-3Nitrobenzene | 760 | ט |
| 78-59-1Isophorone | 760 | ט |
| 88-75-52-Nitrophenol | 760 | ט |
| 105-67-92,4-Dimethylphenol | 760 | ט |
| 111-91-1bis(2-Chloroethoxy)methane | 760 | ט |
| 120-83-22,4-Dichlorophenol | 760 | ט |
| 120-82-11,2,4-Trichlorobenzene | 760 | U |
| 91-20-3Naphthalene | 760 | ט |
| 106-47-84-Chloroaniline | 760 | ט |
| 87-68-3Hexachlorobutadiene | 760 | ט |
| 59-50-74-Chloro-3-methylphenol | 760 | U |
| 91-57-62-Methylnaphthalene | 760 | U |
| 77-47-4Hexachlorocyclopentadiene | 760 | U |
| 88-06-22,4,6-Trichlorophenol | 760 | U |
| 95-95-42,4,5-Trichlorophenol | 1800 | U |
| 91-58-72-Chloronaphthalene | 760 | U |
| 88-74-42-Nitroaniline | 1800 | U |
| 131-11-3Dimethylphthalate | 190 | J |
| 208-96-8Acenaphthylene | 760 | U |
| 606-20-22,6-Dinitrotoluene | 760 | TI TI |
| 99-09-23-Nitroaniline | 1800 | ប |
| | 1 | 1 |
| 83-32-9Acenaphthene | 760 | ש |

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

s-1 Lab Name: NYTEST ENV INC Contract: 9320470 Matrix: (soil/water) SOIL Lab Sample ID: <u>1854701</u> Sample wt/vol: 30.0 (g/mL) GLab File ID: F7590 Level: (low/med) LOW Date Received: 10/14/93 % Moisture: 13 decanted: (Y/N) N Date Extracted: 10/18/93 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93 Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> Q

| • | | | | |
|---|-------------|------|--------|------|
| 51 20 F | | 1000 | | |
| 51-28-52,4-Dinitrophenol 100-02-74-Nitrophenol | | 1800 | Ū | |
| 132-64-9Dibenzofuran | | 1800 | Ü | |
| | | 760 | U | |
| 121-14-22,4-Dinitrotoluene_ | | 760 | U - | |
| 84-66-2Diethylphthalate | | 120 | J | |
| 7005-72-34-Chloropheny1-pheny 86-73-7Fluorene | Arecuer | 760 | Ŭ | |
| 100-01-64-Nitroaniline | | 760 | ប | |
| 534-52-14,6-Dinitro-2-methy: | 1-h1 | 1800 | υ | |
| 86-30-6N-Nitrosodiphenylam | | 1800 | U | |
| 101-55-34-Bromophenyl-phenyl | | 760 | ט | |
| 101-55-5 | recuer | 760 | U | |
| 87-86-5Pentachlorophenol | | 760 | ט | |
| 85-01-8Phenanthrene | | 1800 | U | |
| 120-12-7Anthracene | | 490 | J | |
| 86-74-8Carbazole | | 760 | บ | |
| 84-74-2Di-n-Butylphthalate | | 760 | υ - | |
| 206-44-0Fluoranthene | | 150 | J | |
| | | 690 | J | |
| 129-00-0Pyrene | | 700 | J | |
| 85-68-7Butylbenzylphthalate | | 760 | ט | |
| 91-94-13,3'-Dichlorobenzid | ine | 760 | ט | |
| 56-55-3Benzo(a)anthracene_ | | 290 | J | |
| 218-01-9Chrysene | | 360 | J | |
| 117-81-7bis(2-Ethylhexyl)pht | | 7800 | BE | |
| 117-84-0Di-n-octylphthalate | | 760 | บ | |
| 205-99-2Benzo(b)fluoranthene | 9 | 280 | J | |
| 207-08-9Benzo(k)fluoranthene | 9 | 190 | J | |
| 50-32-8Benzo(a)pyrene | | 200 | J | |
| 193-39-5Indeno(1,2,3-cd)pyre | | 760 | ט | |
| 53-70-3Dibenz(a,h)anthracer | | 760 | ט | |
| 191-24-2Benzo(g,h,i)perylene | | 760 | υ | |
| | | | | 0000 |

| Lab Name: <u>NYTEST ENV</u> | INC Contract | : <u>9320470</u> | |
|-----------------------------|--------------------------------|------------------|----------|
| Lab Code: NYTEST | Case No.: <u>18547</u> SAS No. | : SDG | No.: |
| Matrix: (soil/water) | SOIL | Lab Sample ID: | 1854701 |
| Sample wt/vol: | _30.0 (g/mL) <u>G</u> | Lab File ID: | F7590 |
| Level: (low/med) | LOW | Date Received: | 10/14/93 |
| % Moisture: 13 | decanted: (Y/N) N | Date Extracted: | 10/18/93 |
| | | | |

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.85 | 14000 | ABJ |
| 2. | UNKNOWN | 10.55 | 2400 | J |
| 3. | UNKNOWN | 10.66 | 1100 | J |
| 4. | UNKNOWN ACID | 12.90 | 290 | J |
| 5. | UNKNOWN | 15.96 | 180 | J |
| 6. | UNKNOWN ALKANE | 16.81 | 520 | J |
| 7. | UNKNOWN ALKANE | 17.46 | 450 | J |
| 8. | UNKNOWN | 17.70 | 180 | J |
| 9. | UNKNOWN | 17.93 | 320 | J |
| 10. | UNKNOWN ALKANE | 19.91 | 280 | J |
| 11. | UNKNOWN ALKANE | 20.52 | 180 | J |
| 12. | UNKNOWN ALKANE | 20.61 | 360 | J |
| 13. | UNKNOWN ALKANE | 21.83 | 260 | J |
| 14. | UNKNOWN ALKANE | 26.83 | 2700 | J |
| 15. | UNKNOWN | 28.01 | 4200 | J |
| 16. | UNKNOWN ALKANE | 29.27 | 1600 | J |
| 17. | UNKNOWN | 31.56 | 810 | J |
| 18. | UNKNOWN | 35.01 | 2000 | J |
| 19. | UNKNOWN | 41.50 | 930 | J |
| 20. | UNKNOWN | 45.37 | 1700 | J |
| 21. | UNKNOWN | 48.53 | 1100 | J |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| S-1DL |
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| Lab Name: NYTEST ENV INC Contract | : <u>9320470</u> | s-ldl |
|--|------------------|--------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG | No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: | 1854701 |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: | <u>F7607</u> |
| Level: (low/med) LOW | Date Received: | 10/14/93 |
| % Moisture: 13 decanted: (Y/N) N | Date Extracted: | 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: | 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor: | 4.0 |
| GPC Cleanup: (Y/N) Y pH: 7.4 | | |

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

| | T | |
|--------------------------------------|------|----------------|
| 108-95-2Phenol | 1500 | U |
| 111-44-4bis(2-Chloroethyl)Ether | 1500 | U |
| 95-57-82-Chlorophenol_ | 1500 | ט |
| 541-73-11,3-Dichlorobenzene | 1500 | บ |
| 106-46-71,4-Dichlorobenzene | 1500 | ט |
| 95-50-11,2-Dichlorobenzene | 1500 | ט |
| 95-48-72-Methylphenol_ | 1500 | U |
| 108-60-12,2'-oxybis(1-Chloropropane) | 1500 | ט |
| 106-44-54-Methylphenol | 1500 | บ |
| 621-64-7N-Nitroso-di-n-propylamine | 1500 | ט |
| 67-72-1Hexachloroethane | 1500 | ט |
| 98-95-3Nitrobenzene | 1500 | ប |
| 78-59-1Isophorone | 1500 | ט |
| 88-75-52-Nitrophenol_ | 1500 | ט |
| 105-67-92,4-Dimethylphenol | 1500 | U |
| 111-91-1bis(2-Chloroethoxy)methane | 1500 | ט |
| 120-83-22,4-Dichlorophenol | 1500 | ט |
| 120-82-11,2,4-Trichlorobenzene | 1500 | U |
| 91-20-3Naphthalene | 1500 | U |
| 106-47-84-Chloroaniline | 1500 | U |
| 87-68-3Hexachlorobutadiene | 1500 | U |
| 59-50-74-Chloro-3-methylphenol | 1500 | U |
| 91-57-62-Methylnaphthalene | 1500 | U |
| 77-47-4Hexachlorocyclopentadiene | 1500 | บ |
| 88-06-22,4,6-Trichlorophenol | 1500 | TI . |
| 95-95-42,4,5-Trichlorophenol | 3700 | l u |
| 91-58-72-Chloronaphthalene | 1500 | U |
| 88-74-42-Nitroaniline | 3700 | l _u |
| 131-11-3Dimethylphthalate | 160 | TXI |
| 208-96-8Acenaphthylene | 1500 | TI TI |
| 606-20-22,6-Dinitrotoluene | 1500 | U |
| 99-09-23-Nitroaniline | 3700 | U |
| 83-32-9Acenaphthene | 1500 | u |
| | 1500 | ١ |
| | | |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| S-1DL |
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| Lab Name: NYTEST ENV INC Contra | s-IDL |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS N | o.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854701</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7607</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: 13 decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume:2.0(uL) | Dilution Factor: 4.0 |
| GPC Cleanup: (Y/N) Y pH: 7.4 | ONCENTRATION UNITS: |

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| , · | 3, 3, <u></u> | ~ |
|-------------------------------------|---------------|-----|
| 51-28-52,4-Dinitrophenol | 3700 | U |
| 100-02-74-Nitrophenol | 3700 | υ |
| 132-64-9Dibenzofuran | 1500 | U |
| 121-14-22,4-Dinitrotoluene | 1500 | l u |
| 84-66-2Diethylphthalate | 1500 | U |
| 7005-72-34-Chlorophenyl-phenylether | 1500 | Ü |
| 86-73-7Fluorene | 1500 | Ū |
| 100-01-64-Nitroaniline | 3700 | U |
| 534-52-14,6-Dinitro-2-methylphenol | 3700 | U |
| 86-30-6N-Nitrosodiphenylamine (1) | 1500 | U |
| 101-55-34-Bromophenyl-phenylether | 1500 | ប |
| 118-74-1Hexachlorobenzene | 1500 | ប |
| 87-86-5Pentachlorophenol | 3700 | υ |
| 85-01-8Phenanthrene | 470 | DJ |
| 120-12-7Anthracene | 1500 | ט |
| 86-74-8Carbazole | 1500 | ט |
| 84-74-2Di-n-Butylphthalate | 1500 | U |
| 206-44-0Fluoranthene | 650 | DJ |
| 129-00-0Pyrene | 800 | Ta |
| 85-68-7Butylbenzylphthalate | 1500 | U |
| 91-94-13,3'-Dichlorobenzidine | 1500 | ט |
| 56-55-3Benzo(a) anthracene | 230 | DJ |
| 218-01-9Chrysene | 210 | DJ |
| 117-81-7bis(2-Ethylhexyl)phthalate | 8000 | BD |
| 117-84-0Di-n-octylphthalate | 1500 | ט |
| 205-99-2Benzo(b) fluoranthene | 270 | DJ |
| 207-08-9Benzo(k)fluoranthene | 180 | DJ |
| 50-32-8Benzo(a)pyrene | 200 | ΣΩ |
| 193-39-5Indeno(1,2,3-cd)pyrene | 1500 | U |
| 53-70-3Dibenz(a,h)anthracene | 1500 | U |
| 191-24-2Benzo(g,h,i)perylene | 1500 | U |
| | | |

| S-1DL |
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| Lab Name: NYTEST ENV INC Contract | s-1DL |
|--|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: |
| Matrix: (soil/water) SOIL_ | Lab Sample ID: <u>1854701</u> |
| sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7607</u> |
| Level: (low/med) Low | Date Received: <u>10/14/93</u> |
| % Moisture: 13 decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor: 4.0 |

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS:

Number TICs found: 4

(ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|-------------------------------|-------|------------|-----|
| 1. 2. | UNKNOWN | 6.81 | 15000 | JAB |
| | UNKNOWN | 10.50 | 1000 | J |
| 3. | UNKNOWN ALKANE UNKNOWN ALKANE | 19.88 | 390 | J |
| 4. | | 20.57 | 420 | J |

Lab Name: NYTEST ENV INC Contract: 9320470

| SEMIVOLATILE | ORGANTCS | ANAT.VSTS | DATA | SHEET |
|--------------|----------|-----------|------|-------|

S-10

Lab Sample ID: 1854710

Matrix: (soil/water) SOIL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7626

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 18 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/29/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: _7.4

CONCENTRATION UNITS:

CAS NO. (ug/L or ug/Kg) UG/KG COMPOUND

| 108-95-2Phenol 800 U 111-44-4bis(2-Chloroethyl)Ether 800 U 95-57-82-Chlorophenol 800 U 541-73-11,3-Dichlorobenzene 800 U 106-46-71,4-Dichlorobenzene 800 U 95-50-11,2-Dichlorobenzene 800 U 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
|--|--|
| 95-57-82-Chlorophenol 800 U 541-73-11,3-Dichlorobenzene 800 U 106-46-71,4-Dichlorobenzene 800 U 95-50-11,2-Dichlorobenzene 800 U 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 541-73-11,3-Dichlorobenzene 800 U 106-46-71,4-Dichlorobenzene 800 U 95-50-11,2-Dichlorobenzene 800 U 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 106-46-71,4-Dichlorobenzene 800 U 95-50-11,2-Dichlorobenzene 800 U 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 95-50-11,2-Dichlorobenzene 800 U 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 95-48-72-Methylphenol 800 U 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 108-60-12,2'-oxybis(1-Chloropropane) 800 U 106-44-54-Methylphenol 800 U 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| 106-44-5 | |
| 621-64-7N-Nitroso-di-n-propylamine 800 U | |
| | |
| | |
| 67-72-1Hexachloroethane 800 U | |
| 98-95-3Nitrobenzene 800 U | |
| 78-59-1Isophorone 800 U | |
| 88-75-52-Nitrophenol 800 U | |
| 105-67-92,4-Dimethylphenol 800 U | |
| 111-91-1bis(2-Chloroethoxy)methane 800 U | |
| 120-83-22,4-Dichlorophenol 800 U | |
| 120-82-11,2,4-Trichlorobenzene 800 U | |
| 91-20-3Naphthalene 800 U | |
| 106-47-84-Chloroaniline 800 U | |
| 87-68-3Hexachlorobutadiene 800 U | |
| 59-50-74-Chloro-3-methylphenol 800 U | |
| 91-57-62-Methylnaphthalene 800 U | |
| 77-47-4Hexachlorocyclopentadiene 800 U | |
| 88-06-22,4,6-Trichlorophenol 800 U | |
| 95-95-42,4,5-Trichlorophenol 2000 U | |
| 91-58-72-Chloronaphthalene 800 U | |
| 88-74-42-Nitroaniline 2000 U | |
| 131-11-3Dimethylphthalate 140 J | |
| 208-96-8Acenaphthylene 800 U | |
| 606-20-22,6-Dinitrotoluene 800 U | |
| 99-09-23-Nitroaniline 2000 U | |
| 83-32-9 | |
| - | |

s-10 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: ____ Lab Sample ID: 1854710 Matrix: (soil/water) SOIL Sample wt/vol: 30.0 (g/mL) GLab File ID: F7626 Date Received: 10/14/93 Level: (low/med) LOW ___ % Moisture: 18 decanted: (Y/N) N Date Extracted: 10/18/93 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/29/93 Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u>

| | <u> </u> | 1 |
|-------------------------------------|----------|---|
| 51-28-52,4-Dinitrophenol | 2000 | U |
| 100-02-74-Nitrophenol | 2000 | ט |
| 132-64-9Dibenzofuran | 800 | ט |
| 121-14-22,4-Dinitrotoluene | 800 | U |
| 84-66-2Diethylphthalate | 110 | J |
| 7005-72-34-Chlorophenyl-phenylether | 800 | ט |
| 86-73-7Fluorene | 800 | ע |
| 100-01-64-Nitroaniline | 2000 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 2000 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 800 | บ |
| 101-55-34-Bromophenyl-phenylether | 800 | ט |
| 118-74-1Hexachlorobenzene | 800 | ט |
| 87-86-5Pentachlorophenol | 2000 | ט |
| 85-01-8Phenanthrene | 480 | J |
| 120-12-7Anthracene | 800 | ט |
| 86-74-8Carbazole | 800 | บ |
| 84-74-2Di-n-Butylphthalate | 1300 | 1 |
| 206-44-0Fluoranthene | 770 | J |
| 129-00-0Pyrene | 620 | J |
| 85-68-7Butylbenzylphthalate | 800 | ט |
| 91-94-13,3'-Dichlorobenzidine | 800 | ט |
| 56-55-3Benzo(a)anthracene | 280 | J |
| 218-01-9Chrysene | 360 | J |
| 117-81-7bis(2-Ethylhexyl)phthalate | 2600 | В |
| 117-84-0Di-n-octylphthalate | 800 | บ |
| 205-99-2Benzo(b) fluoranthene | 310 | J |
| 207-08-9Benzo(k)fluoranthene | 220 | J |
| 50-32-8Benzo(a)pyrene | 230 | J |
| 193-39-5Indeno(1,2,3-cd)pyrene | 800 | ט |
| 53-70-3Dibenz(a,h)anthracene | 800 | ט |
| 191-24-2Benzo(g,h,i)perylene | 800 | υ |
| .3. , ,= | 1 | |
| | | |

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| | | | | | | | _ | |
|-------|------|----------|-----|-----|-----------|---------|---|--|
| Lab N | ame: | NYTEST 1 | ENV | INC | Contract: | 9320470 | | |

Lab Code: <u>NYTEST</u> Case No.: <u>18547</u> SAS No.: _____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1854710

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7626

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 18 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/29/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS:

Number TICs found: 16 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.49 | 260 | J |
| 2. | UNKNOWN | 6.82 | 14000 | JAB |
| 3. | UNKNOWN | 6.94 | 390 | J |
| 4. | UNKNOWN | 10.52 | 2800 | J |
| 5. | UNKNOWN | 16.03 | 180 | J |
| 6. | UNKNOWN | 17.92 | 210 | J |
| 7. | UNKNOWN ALKANE | 19.91 | 240 | J |
| 8. | UNKNOWN ALKANE | 20.61 | 250 | J |
| 9. | UNKNOWN ALKANE | 21.81 | 180 | J |
| 10. | UNKNOWN | 23.11 | 230 | J |
| 11. | UNKNOWN | 24.24 | 1000 | J |
| 12. | UNKNOWN | 24.42 | 400 | J |
| 13. | UNKNOWN | 24.79 | 690 | J |
| 14. | UNKNOWN | 25.63 | 600 | J |
| 15. | UNKNOWN | 27.54 | 4700 | J |
| 16. | UNKNOWN | 28.01 | 1600 | J |
| | | | | |

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG

| 108-95-2Phenol_ | 380 | ט |
|--------------------------------------|-----|----|
| 111-44-4bis(2-Chloroethyl)Ether | 380 | ט |
| 95-57-82-Chlorophenol | 380 | ט |
| 541-73-11,3-Dichlorobenzene | 380 | υ |
| 106-46-71,4-Dichlorobenzene | 380 | U |
| 95-50-11,2-Dichlorobenzene | 380 | ט |
| 95-48-72-Methylphenol | 380 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane) | 380 | U |
| 106-44-54-Methylphenol | 380 | ซ |
| 521-64-7N-Nitroso-di-n-propylamine | 380 | U |
| 57-72-1Hexachloroethane | 380 | U |
| 98-95-3Nitrobenzene | 380 | บ |
| 78-59-1Isophorone | 380 | ט |
| 38-75-52-Nitrophenol | 380 | ប |
| 105-67-92,4-Dimethylphenol_ | 380 | ט |
| 111-91-1bis(2-Chloroethoxy)methane | 380 | ט |
| 120-83-22,4-Dichlorophenol | 380 | บ |
| 120-82-11,2,4-Trichlorobenzene | 380 | U |
| 91-20-3Naphthalene | 46 | J |
| 106-47-84-Chloroaniline | 380 | ט |
| 37-68-3Hexachlorobutadiene | 380 | ט |
| 9-50-74-Chloro-3-methylphenol | 380 | U |
| 1-57-62-Methylnaphthalene | 380 | שׁ |
| 77-47-4Hexachlorocyclopentadiene | 380 | ש |
| 38-06-22,4,6-Trichlorophenol | 380 | ט |
| 95-95-42,4,5-Trichlorophenol | 930 | טן |
| 1-58-72-Chloronaphthalene | 380 | บ |
| 88-74-42-Nitroaniline | 930 | Ü |
| 31-11-3Dimethylphthalate | 310 | J |
| 08-96-8Acenaphthylene | 47 | J |
| 06-20-22,6-Dinitrotoluene | 190 | J |
| 9-09-23-Nitroaniline | 930 | U |
| 3-32-9Acenaphthene | 41 | J |

| Lab Name: NYTEST ENV INC Contrac | s-2 ct: <u>9320470</u> | |
|--|-------------------------------|---|
| Lab Code: NYTEST Case No.: 18547 SAS No. | o.: SDG No.: | |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854702</u> | _ |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7608</u> | |
| Level: (low/med) <u>LOW</u> | Date Received: 10/14/93 | |
| % Moisture: 14 decanted: (Y/N) N | Date Extracted: 10/18/93 | |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 | |
| Injection Volume: 2.0(uL) | Dilution Factor: 1.0 | |
| GPC Cleanup: (Y/N) Y pH: 7.3 | ONCENTRATION UNITS: | |

CAS NO. COMPOUND (ug/L or ug/Kg) $\underline{\text{UG/KG}}$ Q

| | | |
|-------------------------------------|---------|-----|
| 51-28-52,4-Dinitrophenol | 930 | U |
| 100-02-74-Nitrophenol | 930 | ט |
| 132-64-9Dibenzofuran | 380 | ט |
| 121-14-22,4-Dinitrotoluene | 380 | U |
| 84-66-2Diethylphthalate | 140 | J |
| 7005-72-34-Chlorophenyl-phenylether | 380 | U |
| 86-73-7Fluorene | 56 | J |
| 100-01-64-Nitroaniline | 930 | บ |
| 534-52-14,6-Dinitro-2-methylphenol | 930 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 380 | ט |
| 101-55-34-Bromophenyl-phenylether | 380 | ט |
| 118-74-1Hexachlorobenzene | 380 | U |
| 87-86-5Pentachlorophenol | 930 | บ |
| 85-01-8Phenanthrene | 510 | ı |
| 120-12-7Anthracene | 96 | J |
| 86-74-8Carbazole | 380 | ប |
| 84-74-2Di-n-Butylphthalate | 170 | J |
| 206-44-0Fluoranthene | 730 | į . |
| 129-00-0Pyrene | 740 | 1 |
| 85-68-7Butylbenzylphthalate | 380 | ט |
| 91-94-13,3'-Dichlorobenzidine | 380 | ט |
| 56-55-3Benzo(a)anthracene | 360 | J |
| 218-01-9Chrysene | 490 | |
| 117-81-7bis(2-Ethylhexyl)phthalate | 640 | В |
| 117-84-0Di-n-octylphthalate | 380 | U |
| 205-99-2Benzo(b) fluoranthene | 350 | J |
| 207-08-9Benzo(k)fluoranthene | 270 | J |
| 50-32-8Benzo(a)pyrene | 320 | J |
| 193-39-5Indeno(1,2,3-cd)pyrene | 200 | J |
| 53-70-3Dibenz(a,h)anthracene | 380 | ט |
| 191-24-2Benzo(g,h,i)perylene | 380 | บ |
| | | _ |

| s-2 |
|-----|
|-----|

| | | | | | | S-2 |
|-----|-------|------------|-----|-----------|---------|-----|
| Lab | Name: | NYTEST ENV | INC | Contract: | 9320470 | |

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854702</u>

Sample wt/vol: 30.0 (g/mL) G Lab File ID: $\underline{\text{F7608}}$

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 14 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: _____1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.83 | 490 | JAB |
| 2. | UNKNOWN | 7.93 | 380 | J |
| 3. | UNKNOWN | 10.52 | 3800 | J |
| 4. | UNKNOWN | 10.60 | 1700 | J |
| 5. | UNKNOWN ALKANE | 11.09 | 360 | J |
| 6. | UNKNOWN | 16.78 | 520 | J |
| 7. | UNKNOWN AROMATIC HYDROCARBON | 17.25 | 170 | J |
| 8. | UNKNOWN ALKANE | 17.41 | 190 | J |
| 9. | UNKNOWN | 17.90 | 330 | J |
| 10. | UNKNOWN AROMATIC | 18.32 | 230 | J |
| 11. | UNKNOWN AROMATIC HYDROCARBON | 18.81 | 210 | J |
| 12. | UNKNOWN | 20.09 | 250 | J |
| 13. | UNKNOWN ALKANE | 20.48 | 160 | J |
| 14. | UNKNOWN ALKANE | 21.66 | 140 | J |
| 15. | UNKNOWN ACID | 23.39 | 600 | J |
| 16. | UNKNOWN ALKANE | 24.84 | 150 | J |
| 17. | UNKNOWN ALKANE | 26.78 | 1600 | J |
| 18. | UNKNOWN | 27.99 | 5800 | J |
| 19. | UNKNOWN | 28.86 | 920 | J |
| 20. | UNKNOWN ALKANE | 29.23 | 1300 | J |
| 21. | UNKNOWN ALKANE | 34.98 | 1500 | J |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| Lab Name: NYTEST ENV INC Cont | ract: <u>9320470</u> |
|--|---|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7596</u> |
| Level: (low/med) <u>LOW</u> | Date Received: 10/14/93 |
| % Moisture: <u>24</u> decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume:2.0(uL) | Dilution Factor:4.0 |
| GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.0</u> | CONCERNEDABLICATION |
| CAS NO. COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q |

| 108-95-2Phenol 111-44-4bis(2-Chloroethyl)Ether 95-57-82-Chlorophenol 541-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol 120-82-11,2,4-Trichlorobenzene | 1000 | J |
|---|------|----|
| 95-57-82-Chlorophenol 541-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7Hexachloroethane 98-95-3Hexachloroethane 98-95-3Isophorone 88-75-5Isophorone 88-75-5Isophorone 105-67-92,4-Dimethylphenol 111-91-1 | 1700 | |
| 541-73-11,3-Dichlorobenzene 106-46-71,4-Dichlorobenzene 95-50-11,2-Dichlorobenzene 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7 | 1700 | บ |
| 106-46-7 | 1700 | υ |
| 95-50-1 | 1700 | ט |
| 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | υ |
| 95-48-72-Methylphenol 108-60-12,2'-oxybis(1-Chloropropane) 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | U |
| 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | ט |
| 106-44-54-Methylphenol 621-64-7N-Nitroso-di-n-propylamine 67-72-1Hexachloroethane 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | บ |
| 67-72-1 | 1700 | U |
| 98-95-3Nitrobenzene 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | Ū |
| 78-59-1Isophorone 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | U |
| 88-75-52-Nitrophenol 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | U |
| 105-67-92,4-Dimethylphenol 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | U |
| 111-91-1bis(2-Chloroethoxy)methane 120-83-22,4-Dichlorophenol | 1700 | U |
| 120-83-22,4-Dichlorophenol | 1700 | U |
| 120-83-22,4-Dichlorophenol | 1700 | lσ |
| 120-82-11,2,4-Trichlorobenzene | 1700 | บ |
| | 1700 | U |
| 91-20-3Naphthalene | 1400 | J |
| 106-47-84-Chloroaniline | 1700 | U |
| 87-68-3Hexachlorobutadiene | 1700 | U |
| 59-50-74-Chloro-3-methylphenol | 1700 | U |
| 91-57-62-Methylnaphthalene | 1900 | |
| 77-47-4Hexachlorocyclopentadiene | 1700 | u |
| 88-06-22,4,6-Trichlorophenol | 1700 | U |
| 95-95-42,4,5-Trichlorophenol | 4200 | U |
| 91-58-72-Chloronaphthalene | 1700 | U |
| 88-74-42-Nitroaniline | 4200 | U |
| 131-11-3Dimethylphthalate | 1700 | U |
| 208-96-8Acenaphthylene | 210 | J |
| 606-20-22,6-Dinitrotoluene | 390 | J |
| 99-09-23-Nitroaniline | 4200 | U |
| 83-32-9Acenaphthene | 350 | J |

| Lab Name: NYTEST ENV INC Cont. | s-3 ract: <u>9320470</u> |
|---|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: F7596 |
| Level: (low/med) <u>LOW</u> | Date Received: 10/14/93 |
| % Moisture: <u>24</u> decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor: 4.0 |
| GPC Cleanup: (Y/N) Y pH: _7.0 | CONCENTRATION UNITS: |
| CAS NO. COMPOUND | (ug/L or ug/Kg) <u>UG/KG</u> Q |

| | 1 | |
|-------------------------------------|------|----|
| 51-28-52,4-Dinitrophenol | 4200 | ט |
| 100-02-74-Nitrophenol | 4200 | ט |
| 132-64-9Dibenzofuran | 360 | J |
| 121-14-22,4-Dinitrotoluene | 1700 | ט |
| 84-66-2Diethylphthalate | 1700 | ט |
| 7005-72-34-Chlorophenyl-phenylether | 1700 | ט |
| 86-73-7Fluorene_ | 340 | J |
| 100-01-64-Nitroaniline | 4200 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 4200 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 210 | J |
| 101-55-34-Bromophenyl-phenylether | 1700 | ט |
| 118-74-1Hexachlorobenzene | 1700 | ប |
| 87-86-5Pentachlorophenol | 4200 | ט |
| 85-01-8Phenanthrene_ | 3400 | |
| 120-12-7Anthracene | 400 | J |
| 86-74-8Carbazole | 1700 | ט |
| 84-74-2Di-n-Butylphthalate | 8100 | |
| 206-44-0Fluoranthene | 1200 | J |
| 129-00-0Pyrene | 1400 | J |
| 85-68-7Butylbenzylphthalate | 1700 | ט |
| 91-94-13,3'-Dichlorobenzidine | 1700 | ט |
| 56-55-3Benzo(a)anthracene | 1400 | J |
| 218-01-9Chrysene | 1500 | J |
| 117-81-7bis(2-Ethylhexyl)phthalate | 570 | BJ |
| 117-84-0Di-n-octylphthalate | 1700 | ט |
| 205-99-2Benzo(b)fluoranthene | 660 | J |
| 207-08-9Benzo(k) fluoranthene | 680 | J |
| 50-32-8Benzo(a)pyrene | 760 | J |
| 193-39-5Indeno(1,2,3-cd)pyrene | 610 | J |
| 53-70-3Dibenz(a,h)anthracene | 1700 | U |
| 191-24-2Benzo(g,h,i)perylene | 530 | J |
| | | |
| | | |

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| Lab Name: NYTEST ENV INC Contra | ct: 9320470 |
|---|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS N | o.: SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: $30.0 (g/mL) G$ | Lab File ID: <u>F7596</u> |
| Level: (low/med) <u>LOW</u> | Date Received: <u>10/14/93</u> |
| % Moisture: <u>24</u> decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor:4.0 |

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ===== |
|------------|------------------------------|-------|------------|------------|
| 1. | UNKNOWN | 6.87 | 16000 | JAB |
| 2. | UNKNOWN AROMATIC HYDROCARBON | 9.40 | 1500 | J |
| 3. | UNKNOWN AROMATIC HYDROCARBON | 10.05 | 3400 | J |
| 4. | UNKNOWN AROMATIC HYDROCARBON | 10.62 | 5000 | J |
| 5. | UNKNOWN AROMATIC HYDROCARBON | 11.13 | 1700 | J |
| 6. | UNKNOWN AROMATIC HYDROCARBON | 11.25 | 2200 | J |
| 7. | UNKNOWN ALKANE | 11.90 | 2600 | J |
| 8. | UNKNOWN AROMATIC HYDROCARBON | 13.01 | 1700 | J |
| 9. | UNKNOWN ALKANE | 14.78 | 1600 | J |
| 10. | UNKNOWN ALKANE | 15.18 | 2500 | J |
| 11. | UNKNOWN AROMATIC HYDROCARBON | 15.73 | 1400 | J |
| 12. | UNKNOWN CYCLOALKANE | 16.00 | 1700 | J |
| 13. | UNKNOWN ALKANE | 16.14 | 860 | J . |
| 14. | UNKNOWN ALKANE | 16.34 | 1400 | J |
| 15. | UNKNOWN ALKANE | 16.67 | 4700 | J |
| 16. | UNKNOWN ALKANE | 16.85 | 2300 | J |
| 17. | UNKNOWN AROMATIC HYDROCARBON | 17.32 | 1500 | J |
| 18. | UNKNOWN ALKANE | 17.54 | 2600 | J |
| 19. | UNKNOWN | 17.97 | 1700 | J |
| 20. | UNKNOWN ALKANE | 19.33 | 1200 | J |
| 21. | UNKNOWN | 20.56 | 2300 | J |
| | | | | |

| Lab Name: NYTEST ENV INC Contr | S-3RE sact: 9320470 |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854703</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7770</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: 24 decanted: (Y/N) N | Date Extracted: 10/30/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 11/08/93 |
| Injection Volume: 2.0(uL) | Dilution Factor: 4.0 |
| GPC Cleanup: (Y/N) Y pH: _7.0 | CONCENTRATION UNITS: |

| CAS NO. | COMPOUND | (ug/L or u | ıg/Kg) <u>UG/KG</u> | Q |
|---------|----------|------------|---------------------|---|
| | | | | |

| | T | |
|---------------------------------------|---------|----|
| 108-95-2Phenol | 310 | J |
| 111-44-4bis(2-Chloroethyl)Ether | 1700 | U |
| 95-57-82-Chlorophenol | 1700 | ט |
| 541-73-11,3-Dichlorobenzene | 1700 | υ |
| 106-46-71,4-Dichlorobenzene | 1700 | ט |
| 95-50-11,2-Dichlorobenzene | 1700 | ט |
| 95-48-72-Methylphenol_ | 1700 | ַ |
| 108-60-12,2'-oxybis(1-Chloropropane)_ | 1700 | ט |
| 106-44-54-Methylphenol | 1700 | U |
| 621-64-7N-Nitroso-di-n-propylamine | 1700 | บ |
| 67-72-1Hexachloroethane | 1700 | ט |
| 98-95-3Nitrobenzene | 1700 | ט |
| 78-59-1Isophorone | 1700 | U |
| 88-75-52-Nitrophenol | 1700 | ט |
| 105-67-92,4-Dimethylphenol_ | 1700 | ប |
| 111-91-1bis(2-Chloroethoxy)methane | 1700 | ប |
| 120-83-22,4-Dichlorophenol | 1700 | ט |
| 120-82-11,2,4-Trichlorobenzene | 1700 | U |
| 91-20-3Naphthalene | 1200 | J |
| 106-47-84-Chloroaniline | 1700 | บ |
| 87-68-3Hexachlorobutadiene | 1700 | ט |
| 59-50-74-Chloro-3-methylphenol | 1700 | ט |
| 91-57-62-Methylnaphthalene | 2200 | ŀ |
| 77-47-4Hexachlorocyclopentadiene | 1700 | ט |
| 88-06-22,4,6-Trichlorophenol | 1700 | υ |
| 95-95-42,4,5-Trichlorophenol | 4200 | U |
| 91-58-72-Chloronaphthalene | 1700 | lσ |
| 88-74-42-Nitroaniline | 4200 | ט |
| 131-11-3Dimethylphthalate | 450 | J |
| 208-96-8Acenaphthylene | 1700 | บ |
| 606-20-22,6-Dinitrotoluene | 1700 | ט |
| 99-09-23-Nitroaniline | 4200 | บ |
| 83-32-9Acenaphthene | 1700 | ט |
| | .=. , , | |
| | | |

S-3RE Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: _____ SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: <u>1854703</u> Sample wt/vol: 30.0 (g/mL) G Lab File ID: <u>F7770</u> Level: (low/med) LOW Date Received: <u>10/14/93</u> % Moisture: 24 decanted: (Y/N) N Date Extracted: 10/30/93 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: <u>11/08/93</u> Injection Volume: 2.0(uL) Dilution Factor: 4.0 GPC Cleanup: (Y/N) Y pH: 7.0CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| 51-28-52,4-Dinitrophenol | 4200 | ט |
|-------------------------------------|------|-----|
| 100-02-74-Nitrophenol | 4200 | บ |
| 132-64-9Dibenzofuran | 1700 | U . |
| 121-14-22,4-Dinitrotoluene | 1700 | ט |
| 84-66-2Diethylphthalate | 1700 | ט |
| 7005-72-34-Chlorophenyl-phenylether | 1700 | ט |
| 86-73-7Fluorene | 1700 | ט |
| 100-01-64-Nitroaniline | 4200 | ប |
| 534-52-14,6-Dinitro-2-methylphenol | 4200 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 1700 | ט |
| 101-55-34-Bromophenyl-phenylether | 1700 | ט |
| 118-74-1Hexachlorobenzene | 1700 | ט |
| 87-86-5Pentachlorophenol | 4200 | ט |
| 85-01-8Phenanthrene | 1700 | ט |
| 120-12-7Anthracene | 1700 | ט |
| 86-74-8Carbazole | 1700 | U |
| 84-74-2Di-n-Butylphthalate | 1700 | U |
| 206-44-0Fluoranthene | 1700 | ט |
| 129-00-0Pyrene | 1700 | lσ |
| 85-68-7Butylbenzylphthalate | 210 | J |
| 91-94-13,3'-Dichlorobenzidine | 1700 | U |
| 56-55-3Benzo(a) anthracene | 1700 | ט |
| 218-01-9Chrysene | 1700 | บ |
| 117-81-7bis(2-Ethylhexyl)phthalate | 760 | вл |
| 117-84-0Di-n-octylphthalate | 1700 | บ |
| 205-99-2Benzo(b) fluoranthene | 1700 | U |
| 207-08-9Benzo(k) fluoranthene | 1700 | บ |
| 50-32-8Benzo(a)pyrene | 1700 | U |
| 193-39-5Indeno(1,2,3-cd)pyrene | 1700 | ט |
| 53-70-3Dibenz(a,h)anthracene | 1700 | u |
| 191-24-2Benzo(g,h,i)perylene | 1700 | ט |
| | | |
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| S-3RE | |
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| | | | | | | S-3RE |
|---------|-------------------|---------|---------------------------------------|---------|---------|---------------|
| Lab Nan | ne: <u>NYTEST</u> | ENV INC | Cor | ntract: | 9320470 | |
| | | | · · · · · · · · · · · · · · · · · · · | | | l |

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854703</u>

Lab File ID: F7770

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 24 decanted: (Y/N) N Date Extracted: 10/30/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/08/93

Injection Volume: _____2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.0

Sample wt/vol: 30.0 (g/mL) G

CONCENTRATION UNITS: Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.70 | 13000 | JAB |
| 2. | UNKNOWN AROMATIC HYDROCARBON | 9.21 | 1400 | J |
| 3. | UNKNOWN AROMATIC HYDROCARBON | 9.86 | 3000 | J |
| 4. | UNKNOWN AROMATIC HYDROCARBON | 10.45 | 4800 | J |
| 5. | UNKNOWN | 10.53 | 1700 | J |
| 6. | UNKNOWN AROMATIC HYDROCARBON | 10.94 | 1900 | J |
| 7. | UNKNOWN AROMATIC HYDROCARBON | 11.08 | 2300 | J |
| 8. | UNKNOWN | 11.73 | 1700 | J |
| 9. | UNKNOWN AROMATIC HYDROCARBON | 12.62 | 490 | J |
| 10. | UNKNOWN AROMATIC HYDROCARBON | 12.84 | 690 | J |
| 11. | UNKNOWN ALKANE | 14.59 | 1500 | J |
| 12. | UNKNOWN | 14.92 | 490 | J |
| 13. | UNKNOWN ALKANE | 15.02 | 2200 | J |
| 14. | UNKNOWN AROMATIC HYDROCARBON | 15.55 | 1500 | J |
| 15. | UNKNOWN | 15.81 | 1500 | J |
| 16. | UNKNOWN ALKANE | 15.95 | 910 | J |
| 17. | UNKNOWN ALKANE | 16.16 | 1200 | J |
| 18. | UNKNOWN ALKANE | 16.48 | 4400 | J |
| 19. | UNKNOWN ALKANE | 16.69 | 2500 | J |
| 20. | UNKNOWN AROMATIC HYDROCARBON | 17.13 | 1900 | J |
| 21. | UNKNOWN ALKANE | 17.85 | 1800 | J |

Lab Name: NYTEST ENV INC Contract: 9320470

Matrix: (soil/water) SOIL Lab Sample ID: 1854704

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7597

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 36 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: ____2.0

GPC Cleanup: (Y/N) Y pH: 7.1

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/kg) UG/kG

| 108-95-2Phenol 111-44-4bis(2-Chloroethyl)Ether 95-57-82-Chlorophenol | 1000 1000 | ט |
|--|--------------|--------|
| 95-57-82-Chlorophenol | 1000 | |
| 95-57-82-Chlorophenol | T000 | U |
| E41 72 1 | 1000 | υ |
| 541-73-11,3-Dichlorobenzene | 1000 | U |
| 106-46-71,4-Dichlorobenzene | 1000 | U |
| 95-50-11,2-Dichlorobenzene | 1000 | U |
| 95-48-72-Methylphenol | 1000 | U |
| 108-60-12,2'-oxybis(1-Chloropropane) | 1000 | U |
| 106-44-54-Methylphenol | 1000 | ט |
| 621-64-7N-Nitroso-di-n-propylamine | 1000 | ט |
| 67-72-1Hexachloroethane | 1000 | ט |
| 98-95-3Nitrobenzene | 1000 | υ |
| 78-59-1Isophorone | 1000 | ט |
| 88-75-52-Nitrophenol | 1000 | บ |
| 105-67-92,4-Dimethylphenol | 1000 | ט |
| 111-91-1bis(2-Chloroethoxy)methane | 1000 | U |
| 120-83-22,4-Dichlorophenol | 1000 | U |
| 120-82-11,2,4-Trichlorobenzene | 1000 | U |
| 91-20-3Naphthalene | 1000 | U |
| 106-47-84-Chloroaniline | 1000 | ט |
| 87-68-3Hexachlorobutadiene | 1000 | U |
| 59-50-74-Chloro-3-methylphenol | 1000 | U |
| 91-57-62-Methylnaphthalene | 1000 | U |
| 77-47-4Hexachlorocyclopentadiene | 1000 | ü |
| 88-06-22,4,6-Trichlorophenol | 1000 | U |
| 95-95-42,4,5-Trichlorophenol | 2500 | U |
| 91-58-72-Chloronaphthalene | 1000 | U |
| 88-74-42-Nitroaniline | 2500 | U |
| 131-11-3Dimethylphthalate | 3600 | • |
| 208-96-8Acenaphthylene | 1000 | U |
| 506-20-22,6-Dinitrotoluene | 1000 | ט ט |
| 99-09-23-Nitroaniline | 2500 | TT |
| 33-32-9Acenaphthene | 1000 | Ü |

S-4 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: <u>1854704</u> Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7597 Level: (low/med) LOW Date Received: <u>10/14/93</u> % Moisture: 36 decanted: (Y/N) N Date Extracted: 10/18/93 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93 Injection Volume: _____2.0(uL) Dilution Factor: _____2.0 GPC Cleanup: (Y/N) Y pH: 7.1 CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| | | 1 |
|--|-------------|----------------|
| 51-28-52,4-Dinitrophenol | 2500 | ט |
| 100-02-74-Nitrophenol | 2500 | ט |
| 132-64-9Dibenzofuran_ | 1000 | ט |
| 121-14-22,4-Dinitrotoluene | 1000 | U |
| 84-66-2Diethylphthalate | 840 | J |
| 7005-72-34-Chlorophenyl-phenylether | 1000 | υ |
| 86-73-7Fluorene_ | 1000 | U |
| 100-01-64-Nitroaniline | 2500 | υ |
| 534-52-14,6-Dinitro-2-methylphenol | 2500 | U |
| 86-30-6N-Nitrosodiphenylamine (1) | 1000 | ט |
| 101-55-34-Bromophenyl-phenylether | 1000 | ט |
| 118-74-1Hexachlorobenzene | 1000 | U |
| 87-86-5Pentachlorophenol | 2500 | ט |
| 85-01-8Phenanthrene | 1000 | ַט |
| 120-12-7Anthracene | 1000 | ט |
| 86-74-8Carbazole | 1000 | lυ |
| 84-74-2Di-n-Butylphthalate | 210 | J |
| 206-44-0Fluoranthene | 1000 | U |
| 129-00-0Pyrene | 1000 | lυ |
| 85-68-7Butylbenzylphthalate | 1000 | U |
| 91-94-13,3'-Dichlorobenzidine | 1000 | U |
| 56-55-3Benzo(a)anthracene | 1000 | U |
| 218-01-9Chrysene | 1000 | Ü |
| 117-81-7bis(2-Ethylhexyl)phthalate | 510 | ВЛ |
| 117-84-0Di-n-octylphthalate | 1000 | U |
| 205-99-2Benzo(b) fluoranthene | 1000 | U |
| 207-08-9Benzo(k)fluoranthene | 1000 | n n |
| 50-32-8Benzo(a)pyrene | 1000 | ט |
| 193-39-5Indeno(1,2,3-cd)pyrene | 1000 | l _o |
| 53-70-3Dibenz(a,h)anthracene | 1000 | 111 |
| 191-24-2Benzo(g,h,i)perylene | 1000 | la la |
| zoz zo z z z z z z z z z z z z z z z z | 1000 | ١٥ |
| | l | -1 |

| | | | | | | 1 5-4 | |
|-----|-------|------------|-----|-----------|---------|-------|--|
| Lab | Name: | NYTEST ENV | INC | Contract: | 9320470 | | |

Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.:

Matrix: (soil/water) SOIL Lab Sample ID: 1854704

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7597

Level: (low/med) LOW_ Date Received: 10/14/93

% Moisture: 36 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.1

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.82 | 6000 | JAB |
| 2. | UNKNOWN | 10.55 | 9100 | J |
| 3. | UNKNOWN | 10.65 | 2400 | J |
| 4. | UNKNOWN ALKANE | 11.14 | 3000 | J |
| 5. | UNKNOWN ALKANE | 11.52 | 1400 | J |
| 6. | UNKNOWN | 12.21 | 1500 | J |
| 7. | UNKNOWN | 12.98 | 2300 | J |
| 8. | UNKNOWN ALKANE | 13.08 | 1100 | J |
| 9. | UNKNOWN | 17.96 | 1900 | J |
| 10. | UNKNOWN | 18.17 | 2100 | J |
| 11. | UNKNOWN | 20.13 | 880 | J |
| 12. | UNKNOWN ACID | 22.63 | 3300 | J |
| 13. | UNKNOWN ACID | 23.42 | 850 | J |
| 14. | UNKNOWN | 24.43 | 870 | J |
| 15. | UNKNOWN ALKANE | 25.83 | 5300 | J |
| 16. | UNKNOWN ALKANE | 26.83 | 2700 | J |
| 17. | UNKNOWN | 27.95 | 2600 | J |
| 18. | UNKNOWN | 28.88 | 3800 | J |
| 19. | UNKNOWN ALKANE | 29.25 | 1800 | J |
| 20. | UNKNOWN | 30.75 | 2000 | J |
| 21. | UNKNOWN | 34.98 | 2100 | J |

Lab Name: NYTEST ENV INC Contract: 9320470

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

s-5

Lab Sample ID: <u>1854705</u>

Lab Code: NYTEST | Case No.: 18547 | SAS No.: _____ | SDG No.: _____

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7598

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 37 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: ____10.0

GPC Cleanup: (Y/N) <u>Y</u> pH: <u>6.7</u>

83-32-9----Acenaphthene_

Matrix: (soil/water) SOIL

CAS NO. COMPOUND CONCENTRATION UNITS:

| | Ì | | |
|--------------------------------------|-------|----|---|
| 108-95-2Phenol_ | 5200 | ט | |
| 111-44-4bis(2-Chloroethyl)Ether | 5200 | ט | |
| 95-57-82-Chlorophenol | 5200 | ט | |
| 541-73-11,3-Dichlorobenzene_ | 5200 | ט | |
| 106-46-71,4-Dichlorobenzene | 5200 | υ | |
| 95-50-11,2-Dichlorobenzene | 5200 | שׁ | |
| 95-48-72-Methylphenol_ | 5200 | U | |
| 108-60-12,2'-oxybis(1-Chloropropane) | 5200 | U | ļ |
| 106-44-54-Methylphenol_ | 5200 | U | i |
| 621-64-7N-Nitroso-di-n-propylamine | 5200 | ט | |
| 67-72-1Hexachloroethane | 5200 | ט | 1 |
| 98-95-3Nitrobenzene | 5200 | U | |
| 78-59-1Isophorone | 5200 | U | |
| 88-75-52-Nitrophenol | 5200 | U | |
| 105-67-92,4-Dimethylphenol_ | 5200 | ט | |
| 111-91-1bis(2-Chloroethoxy)methane | 5200 | ט | ŀ |
| 120-83-22,4-Dichlorophenol | 5200 | ט | |
| 120-82-11,2,4-Trichlorobenzene | 5200 | ט | l |
| 91-20-3Naphthalene | 5200 | ט | |
| 106-47-84-Chloroaniline | 5200 | ט | |
| 87-68-3Hexachlorobutadiene | 5200 | ט | |
| 59-50-74-Chloro-3-methylphenol | 5200 | บ | |
| 91-57-62-Methylnaphthalene | 5200 | U | |
| 77-47-4Hexachlorocyclopentadiene | 5200 | บ | |
| 88-06-22,4,6-Trichlorophenol_ | 5200 | U | |
| 95-95-42,4,5-Trichlorophenol | 13000 | ט | |
| 91-58-72-Chloronaphthalene | 5200 | U | |
| 88-74-42-Nitroaniline | 13000 | บ | |
| 131-11-3Dimethylphthalate | 5200 | ט | |
| 208-96-8Acenaphthylene | 5200 | ซ | |
| 606-20-22,6-Dinitrotoluene | 1100 | J | |
| 99-09-23-Nitroaniline | 13000 | Ū | |

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| Lab Name: NYTEST ENV INC Cont | s-5 |
|--|---|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: 1854705 |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7598</u> |
| Level: (low/med) <u>LOW</u> | Date Received: 10/14/93 |
| % Moisture: <u>37</u> decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor:10.0 |
| GPC Cleanup: (Y/N) <u>Y</u> pH: <u>6.7</u> | CONCERNION INTERC |
| CAS NO. COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q |

| | | |
|-------------------------------------|--------------|--------|
| 51-28-52,4-Dinitrophenol | 13000 | U |
| 100-02-74-Nitrophenol | 13000 | บ |
| 132-64-9Dibenzofuran | 5200 | lυ |
| 121-14-22,4-Dinitrotoluene | 5200 | U |
| 84-66-2Diethylphthalate | 5200 | ט |
| 7005-72-34-Chlorophenyl-phenylether | 5200 | ט |
| 86-73-7Fluorene | 5200 | ט |
| 100-01-64-Nitroaniline | 13000 | U |
| 534-52-14,6-Dinitro-2-methylphenol | 13000 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 5200 | ט |
| 101-55-34-Bromophenyl-phenylether | 5200 | ט |
| 118-74-1Hexachlorobenzene | 5200 | U |
| 87-86-5Pentachlorophenol | 13000 | U |
| 85-01-8Phenanthrene | 530 | J |
| 120-12-7Anthracene | 5200 | U |
| 86-74-8Carbazole | 5200 | U |
| 84-74-2Di-n-Butylphthalate | 5200 | U |
| 206-44-0Fluoranthene | 5200 | U |
| 129-00-0Pyrene | 5200 | ט |
| 85-68-7Butylbenzylphthalate | 5200 | U |
| 91-94-13,3'-Dichlorobenzidine | 5200 | U |
| 56-55-3Benzo(a)anthracene | 5200 | U |
| 218-01-9Chrysene | 5200 | u |
| 117-81-7bis(2-Ethylhexyl)phthalate | 2400 | ВЛ |
| 117-84-0Di-n-octylphthalate | 5200 | U |
| 205-99-2Benzo(b) fluoranthene | 5200 | ט |
| 207-08-9Benzo(k) fluoranthene | 5200 | ט ט |
| 50-32-8Benzo(a)pyrene | 5200 | ט |
| 193-39-5Indeno(1,2,3-cd)pyrene | 5200 | ם ו |
| 53-70-3Dibenz(a,h)anthracene | 5200 | บ |
| 191-24-2Benzo(g,h,i)perylene | 5200 5200 | ט |
| (3) = | 32,00 | ١ |
| | 1 | 1 |

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|--------------------------|--------------------------|-------------|
| Lab Name: NYTEST ENV INC | Contract: <u>9320470</u> | |

Matrix: (soil/water) SOIL Lab Sample ID: 1854705

Sample wt/vol: 30.0 (g/mL) G Lab File ID: <u>F7598</u>

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 37 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: ____10.0

GPC Cleanup: (Y/N) Y pH: 6.7

CONCENTRATION UNITS: Number TICs found: 19 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.81 | 10000 | JAB |
| 2. | UNKNOWN | 9.97 | 1400 | J |
| 3. | UNKNOWN ALKENE | 10.57 | 7100 | J |
| 4. | UNKNOWN | 10.66 | 7000 | J |
| 5. | UNKNOWN | 11.36 | 1500 | J |
| 6. | UNKNOWN | 14.42 | 1500 | J |
| 7. | UNKNOWN | 14.69 | 1200 | J |
| 8. | UNKNOWN | 15.64 | 9600 | J |
| 9. | UNKNOWN | 16.05 | 1100 | J |
| 10. | UNKNOWN | 16.82 | 7700 | J |
| 11. | UNKNOWN | 17.27 | 2500 | J |
| 12. | UNKNOWN | 17.47 | 16000 | J |
| 13. | UNKNOWN ALKANE | 17.69 | 4300 | J |
| 14. | UNKNOWN AROMATIC | 18.36 | 4900 | J |
| 15. | UNKNOWN | 18.53 | 1900 | J |
| 16. | UNKNOWN | 18.81 | 5500 | J |
| 17. | UNKNOWN | 19.71 | 1300 | J |
| 18. | UNKNOWN | 20.87 | 7900 | J |
| 19. | UNKNOWN | 22.54 | 9700 | J |

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| Lab Name: NYTEST ENV INC | S-5RE Contract: 9320470 |
|--------------------------------------|--------------------------------|
| Lab Code: NYTEST Case No.: 18547 | SAS No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854705</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7610</u> |
| Level: (low/med) LOW | Date Received: <u>10/14/93</u> |
| % Moisture: 37 decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (| uL) Date Analyzed: 10/28/93 |
| Injection Volume:2.0(uL) | Dilution Factor: 10.0 |
| GPC Cleanup: (Y/N) Y pH: 6. | 7 CONCENTRATION UNITS: |
| CAS NO. COMPOUND | (ug/L or ug/kg) <u>UG/kg</u> Q |

| | T | |
|--------------------------------------|-------|----------------|
| 108-95-2Phenol | 5200 | U |
| 111-44-4bis(2-Chloroethyl)Ether | 5200 | ָ _ט |
| 95-57-82-Chlorophenol | 5200 | U |
| 541-73-11,3-Dichlorobenzene | 5200 | U |
| 106-46-71,4-Dichlorobenzene | 5200 | U |
| 95-50-11,2-Dichlorobenzene | 5200 | ט |
| 95-48-72-Methylphenol | 5200 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane) | 5200 | U |
| 106-44-54-Methylphenol | 5200 | טו |
| 621-64-7N-Nitroso-di-n-propylamine | 5200 | l u |
| 67-72-1Hexachloroethane | 5200 | U |
| 98-95-3Nitrobenzene | 5200 | U |
| 78-59-1Isophorone | 5200 | U |
| 88-75-52-Nitrophenol | 5200 | U |
| 105-67-92,4-Dimethylphenol | 5200 | U |
| 111-91-1bis(2-Chloroethoxy)methane | 5200 | ט |
| 120-83-22,4-Dichlorophenol | 5200 | ט |
| 120-82-11,2,4-Trichlorobenzene | 5200 | U |
| 91-20-3Naphthalene | 5200 | U |
| 106-47-84-Chloroaniline | 5200 | U |
| 87-68-3Hexachlorobutadiene | 5200 | U |
| 59-50-74-Chloro-3-methylphenol | 5200 | ט ט |
| 91-57-62-Methylnaphthalene | 5200 | บ |
| 77-47-4Hexachlorocyclopentadiene | 5200 | U |
| 88-06-22,4,6-Trichlorophenol | 5200 | ט |
| 95-95-42,4,5-Trichlorophenol | 13000 | บ |
| 91-58-72-Chloronaphthalene | 5200 | Ü |
| 88-74-42-Nitroaniline | 13000 | บ |
| 131-11-3Dimethylphthalate | 5200 | U |
| 208-96-8Acenaphthylene | 5200 | l ⁿ |
| 606-20-22,6-Dinitrotoluene | 1100 | J |
| 99-09-23-Nitroaniline | 13000 | U |
| 83-32-9Acenaphthene | 5200 | U |
| • | 7200 | 1 |

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FORM I SV-1

| Lab Name: NYTEST ENV INC Contr | s-5re act: <u>9320470</u> |
|--|---|
| Lab Code: NYTEST Case No.: 18547 SAS | No.:SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854705</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7610</u> |
| Level: (low/med) LOW | Date Received: 10/14/93 |
| % Moisture: 37 decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume:2.0(uL) | Dilution Factor:10.0 |
| GPC Cleanup: (Y/N) <u>Y</u> pH: <u>6.7</u> | 20127 |
| | CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u> Q |

| | 1 | |
|-------------------------------------|-------|---------|
| 51-28-52,4-Dinitrophenol | 13000 | ט |
| 100-02-74-Nitrophenol | 13000 | U |
| 132-64-9Dibenzofuran | 5200 | ט |
| 121-14-22,4-Dinitrotoluene | 5200 | ט |
| 84-66-2Diethylphthalate | 5200 | U |
| 7005-72-34-Chlorophenyl-phenylether | 5200 | ט |
| 86-73-7Fluorene | 5200 | ט |
| 100-01-64-Nitroaniline | 13000 | U |
| 534-52-14,6-Dinitro-2-methylphenol_ | 13000 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 5200 | ן ט |
| 101-55-34-Bromophenyl-phenylether | 5200 | U |
| 118-74-1Hexachlorobenzene | 5200 | ט |
| 87-86-5Pentachlorophenol | 13000 | ט |
| 85-01-8Phenanthrene | 580 | J |
| 120-12-7Anthracene | 5200 | ט |
| 86-74-8Carbazole | 5200 | ט |
| 84-74-2Di-n-Butylphthalate | 660 | J |
| 206-44-0Fluoranthene | 5200 | ט |
| 129-00-0Pyrene | 5200 | ט |
| 85-68-7Butylbenzylphthalate | 880 | J |
| 91-94-13,3'-Dichlorobenzidine | 5200 | טן |
| 56-55-3Benzo(a) anthracene | 5200 | ט |
| 218-01-9Chrysene | 5200 | บ |
| 117-81-7bis(2-Ethylhexyl)phthalate | 2300 | BJ |
| 117-84-0Di-n-octylphthalate | 630 | J |
| 205-99-2Benzo(b) fluoranthene | 5200 | ט |
| 207-08-9Benzo(k)fluoranthene | 5200 | ט |
| 50-32-8Benzo(a)pyrene | 5200 | ָט ט |
| 193-39-5Indeno(1,2,3-cd)pyrene | 5200 | U |
| 53-70-3Dibenz(a,h)anthracene | 5200 | U |
| 191-24-2Benzo(g,h,i)perylene | 5200 | บ |
| (3//-// | | 1 |
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S-5RE

Lab Name: NYTEST ENV INC Contract: 9320470

Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1854705

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7610

Level: (low/med) Low Date Received: 10/14/93

% Moisture: 37 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: ____10.0

GPC Cleanup: (Y/N) Y pH: 6.7

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 19

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.76 | 11000 | JAB |
| 2. | UNKNOWN AROMATIC HYDROCARBON | 9.96 | 2600 | J |
| 3. | UNKNOWN ALKENE | 10.53 | 4700 | J |
| 4. | UNKNOWN | 13.75 | 1300 | J |
| 5. | UNKNOWN | 14.46 | 1400 | J |
| 6. | UNKNOWN | 15.11 | 2500 | J |
| 7. | UNKNOWN | 15.60 | 9100 | J |
| 8. | UNKNOWN AROMATIC HYDROCARBON | 16.04 | 1400 | J |
| 9. | UNKNOWN | 16.22 | 2100 | J |
| 10. | UNKNOWN | 16.67 | 2000 | J |
| 11. | UNKNOWN | 16.79 | 6200 | J |
| 12. | UNKNOWN | 17.06 | 1500 | J |
| 13. | UNKNOWN | 17.26 | 1600 | J |
| 14. | UNKNOWN ALKANE | 17.42 | 3200 | J |
| L5. | UNKNOWN | 17.91 | 1500 | J |
| L6. | UNKNOWN | 18.50 | 2000 | J |
| L7. | UNKNOWN | 18.77 | 5800 | J |
| l8. | UNKNOWN | 20.03 | 1500 | J |
| l9. | UNKNOWN | 20.84 | 7000 | J |

| | | | s-6 |
|---|-----------|---------|-----|
| _ | Contract: | 9320470 | |

| Lab Code | e: NYTEST | Case No.: 18547 | SAS No | SDC No . | |
|----------|-----------|-----------------|--------|----------|--|

Matrix: (soil/water) SOIL Lab Sample ID: 1854706

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7601

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 34 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

Lab Name: <u>NYTEST ENV INC</u>

CAS NO. COMPOUND COMP

| | 1 | T |
|--------------------------------------|------|--------|
| 108-95-2Phenol | 500 | ט |
| 111-44-4bis(2-Chloroethyl)Ether | 500 | U |
| 95-57-82-Chlorophenol | 500 | ט |
| 541-73-11,3-Dichlorobenzene | 500 | ט |
| 106-46-71,4-Dichlorobenzene | 500 | ט |
| 95-50-11,2-Dichlorobenzene | 500 | ט |
| 95-48-72-Methylphenol | 500 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane) | 500 | U |
| 106-44-54-Methylphenol_ | 500 | ט |
| 621-64-7N-Nitroso-di-n-propylamine | 500 | U |
| 67-72-1Hexachloroethane | 500 | U |
| 98-95-3Nitrobenzene_ | 500 | U |
| 78-59-1Isophorone | 500 | U |
| 88-75-52-Nitrophenol | 500 | U |
| 105-67-92,4-Dimethylphenol | 500 | U |
| 111-91-1bis(2-Chloroethoxy)methane | 500 | U |
| 120-83-22,4-Dichlorophenol | 500 | U |
| 120-82-11,2,4-Trichlorobenzene | 500 | U |
| 91-20-3Naphthalene | 56 | J |
| 106-47-84-Chloroaniline | 500 | U |
| 87-68-3Hexachlorobutadiene | 500 | U |
| 59-50-74-Chloro-3-methylphenol | 500 | U |
| 91-57-62-Methylnaphthalene | 500 | U |
| 77-47-4Hexachlorocyclopentadiene | 500 | U |
| 88-06-22,4,6-Trichlorophenol | 500 | U |
| 95-95-42,4,5-Trichlorophenol | 1200 | U |
| 91-58-72-Chloronaphthalene | 500 | u |
| 88-74-42-Nitroaniline | 1200 | U |
| 131-11-3Dimethylphthalate | 2200 | ١ |
| 208-96-8Acenaphthylene | 500 | U |
| 606-20-22,6-Dinitrotoluene | 250 | J |
| 99-09-23-Nitroaniline | 1200 | n n |
| 83-32-9Acenaphthene | 500 | n o |
| | 500 | ١ |

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FORM I SV-1

Von Konninhan Derry

s-6

| Lab Name: NYTEST ENV INC Contr | ract: 9320470 |
|---|-------------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS | No.: SDG No.: |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854706</u> |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7601</u> |
| Level: (low/med) LOW_ | Date Received: 10/14/93 |
| % Moisture: 34 decanted: (Y/N) N | Date Extracted: 10/18/93 |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 |
| Injection Volume: 2.0(uL) | Dilution Factor:1.0 |
| GPC Cleanup: (Y/N) Y pH: 7.0 | CONCENTRATION UNITS: |
| CAS NO. COMPOUND | (ug/L or ug/Kg) UG/KG O |

| | | 1 |
|-------------------------------------|------|---|
| 51-28-52,4-Dinitrophenol | 1200 | ט |
| 100-02-74-Nitrophenol | 1200 | บ |
| 132-64-9Dibenzofuran | 52 | J |
| 121-14-22,4-Dinitrotoluene | 500 | ט |
| 84-66-2Diethylphthalate | 510 | 1 |
| 7005-72-34-Chlorophenyl-phenylether | 500 | ט |
| 86-73-7Fluorene | 53 | J |
| 100-01-64-Nitroaniline | 1200 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 1200 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 500 | ט |
| 101-55-34-Bromophenyl-phenylether | 500 | บ |
| 118-74-1Hexachlorobenzene | 500 | U |
| 87-86-5Pentachlorophenol | 1200 | U |
| 85-01-8Phenanthrene | 240 | J |
| 120-12-7Anthracene | 500 | บ |
| 86-74-8Carbazole | 500 | บ |
| 84-74-2Di-n-Butylphthalate | 120 | J |
| 206-44-0Fluoranthene | 170 | J |
| 129-00-0Pyrene | 170 | J |
| 85-68-7Butylbenzylphthalate | 300 | J |
| 91-94-13,3'-Dichlorobenzidine | 500 | บ |
| 56-55-3Benzo(a) anthracene | 500 | U |
| 218-01-9Chrysene | 80 | J |
| 117-81-7bis(2-Ethylhexyl)phthalate | 510 | В |
| 117-84-0Di-n-octylphthalate | 500 | บ |
| 205-99-2Benzo(b) fluoranthene | 500 | ט |
| 207-08-9Benzo(k)fluoranthene | 500 | U |
| 50-32-8Benzo(a)pyrene | 500 | υ |
| 193-39-5Indeno(1,2,3-cd)pyrene | 500 | ט |
| 53-70-3Dibenz(a,h)anthracene | 500 | U |
| 191-24-2Benzo(g,h,i)perylene | 500 | ט |
| | | _ |

| s-6 | |
|-----|--|
|-----|--|

Lab Name: NYTEST ENV INC Contract: 9320470

Lab Code: <u>NYTEST</u> Case No.: <u>18547</u> SAS No.: _____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854706</u>

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7601

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 34 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.81 | 1600 | JAB |
| 2. | UNKNOWN | 7.95 | 220 | J |
| 3. | UNKNOWN ALKANE | 9.30 | 320 | J |
| 4. | UNKNOWN | 10.54 | 2300 | J |
| 5. | UNKNOWN | 10.64 | 630 | J |
| 6. | UNKNOWN ALKANE | 11.12 | 1100 | J |
| 7. | UNKNOWN ALKANE | 11.25 | 470 | J |
| 8. | UNKNOWN ALKANE | 11.51 | 500 | J |
| 9. | UNKNOWN ALKANE | 11.85 | 170 | J |
| 10. | UNKNOWN | 12.93 | 240 | J |
| 11. | UNKNOWN ALKANE | 13.05 | 200 | J |
| 12. | UNKNOWN ALKANE | 16.81 | 190 | J |
| 13. | UNKNOWN | 17.95 | 300 | J |
| 14. | UNKNOWN AROMATIC | 18.35 | 180 | J |
| 15. | UNKNOWN | 19.89 | 130 | J |
| 16. | UNKNOWN ACID | 21.19 | 600 | J |
| 17. | UNKNOWN ACID | 22.62 | 780 | J |
| 18. | UNKNOWN ACID | 23.45 | 2600 | J |
| 19. | UNKNOWN ALKANE | 23.86 | 480 | J |
| 20. | UNKNOWN ALKANE | 24.88 | 260 | J |
| 21. | UNKNOWN ACID | 25.49 | 1500 | J |
| | | | | |

| Lab Name: NYTEST ENV INC Contract | s-6RE t: <u>9320470</u> | | | | | |
|--|-------------------------------|--|--|--|--|--|
| Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: | | | | | | |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854706</u> | | | | | |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7797</u> | | | | | |
| Level: (low/med) LOW | Date Received: 10/14/93 | | | | | |
| % Moisture: 34 decanted: (Y/N) N | Date Extracted: 10/18/93 | | | | | |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 11/09/93 | | | | | |
| Injection Volume: 2.0(uL) | Dilution Factor: 4.0 | | | | | |

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| | ı — | Γ |
|--------------------------------------|------|------|
| 108-95-2Phenol | 2000 | U |
| 111-44-4bis(2-Chloroethyl)Ether | 2000 | ט |
| 95-57-82-Chlorophenol | 2000 | U |
| 541-73-11,3-Dichlorobenzene | 2000 | ט |
| 106-46-71,4-Dichlorobenzene | 2000 | U |
| 95-50-11,2-Dichlorobenzene | 2000 | ט |
| 95-48-72-Methylphenol_ | 2000 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane) | 2000 | ט |
| 106-44-54-Methylphenol | 2000 | U |
| 621-64-7N-Nitroso-di-n-propylamine | 2000 | ט |
| 67-72-1Hexachloroethane | 2000 | U |
| 98-95-3Nitrobenzene_ | 2000 | ט |
| 78-59-1Isophorone | 2000 | ט |
| 88-75-52-Nitrophenol | 2000 | ט |
| 105-67-92,4-Dimethylphenol | 2000 | υ |
| 111-91-1bis(2-Chloroethoxy)methane | 2000 | U |
| 120-83-22,4-Dichlorophenol | 2000 | บ |
| 120-82-11,2,4-Trichlorobenzene | 2000 | U |
| 91-20-3Naphthalene | 2000 | U |
| 106-47-84-Chloroaniline | 2000 | ט |
| 87-68-3Hexachlorobutadiene | 2000 | U |
| 59-50-74-Chloro-3-methylphenol | 2000 | Ü |
| 91-57-62-Methylnaphthalene | 2000 | ט |
| 77-47-4Hexachlorocyclopentadiene | 2000 | U |
| 88-06-22,4,6-Trichlorophenol | 2000 | U |
| 95-95-42,4,5-Trichlorophenol | 4800 | lu . |
| 91-58-72-Chloronaphthalene | 2000 | U |
| 88-74-42-Nitroaniline | 4800 | U |
| 131-11-3Dimethylphthalate | 9300 | ٦ |
| 208-96-8Acenaphthylene | 2000 | บ |
| 606-20-22,6-Dinitrotoluene | 2000 | ט |
| 99-09-23-Nitroaniline | 4800 | n n |
| 83-32-9Acenaphthene | 2000 | u u |
| | 2000 | ١ |
| | | |

S-6RE

Lab Name: NYTEST ENV INC Contract: 9320470

Matrix: (soil/water) SOIL Lab Sample ID: 1854706

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7797

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 34 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/09/93

Injection Volume: _____2.0(uL) Dilution Factor: ____4.0

GPC Cleanup: $(Y/N) \underline{Y}$ pH: $\underline{7.0}$

CAS NO. COMPOUND COMP

| 51-28-52,4-Dinitrophenol 100-02-74-Nitrophenol | 4800 | |
|---|------|----------|
| 100-02-74-Nitrophenol | *** | ן ט |
| 100 01 / INITIAL OPINOTION | 4800 | ט |
| 132-64-9Dibenzofuran | 200 | J |
| 121-14-22,4-Dinitrotoluene | 2000 | ט |
| 84-66-2Diethylphthalate | 2500 | - |
| 7005-72-34-Chlorophenyl-phenylether | 2000 | ט |
| 86-73-7Fluorene | 2000 | ט |
| 100-01-64-Nitroaniline | 4800 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 4800 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 2000 | ט |
| 101-55-34-Bromophenyl-phenylether | 2000 | ט |
| 118-74-1Hexachlorobenzene | 2000 | ט |
| 87-86-5Pentachlorophenol | 4800 | ับ |
| 85-01-8Phenanthrene | 540 | J |
| 120-12-7Anthracene | 2000 | ט |
| 86-74-8Carbazole | 2000 | ט |
| 84-74-2Di-n-Butylphthalate | 2000 | U |
| 206-44-0Fluoranthene | 340 | J |
| 129-00-0Pyrene | 2000 | ט |
| 85-68-7Butylbenzylphthalate | 2000 | ט |
| 91-94-13,3'-Dichlorobenzidine | 2000 | ט |
| 56-55-3Benzo(a) anthracene | 2000 | ט |
| 218-01-9Chrysene | 2000 | U |
| 117-81-7bis(2-Ethylhexyl)phthalate | 2000 | В |
| 117-84-0Di-n-octylphthalate | 2000 | ט |
| 205-99-2Benzo(b) fluoranthene | 2000 | ט |
| 207-08-9Benzo(k)fluoranthene | 2000 | บ |
| 50-32-8Benzo(a)pyrene | 2000 | ט |
| 193-39-5Indeno(1,2,3-cd)pyrene | 2000 | ט |
| 53-70-3Dibenz(a,h)anthracene | 2000 | ט |
| 191-24-2Benzo(g,h,i)perylene | 2000 | υ |

S-6RE

Lab File ID: <u>F7797</u>

Lab Name: NYTEST ENV INC Contract: 9320470

Lab Code: NYTEST Case No.: 18547 SAS No.: _____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: <u>1854706</u>

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 34 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 11/09/93

Injection Volume: _____2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.0

Sample wt/vol: 30.0 (g/mL) G

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q ====== |
|------------|----------------|-------|------------|-------------|
| 1. | UNKNOWN | 6.66 | 7800 | JAB |
| 2. | UNKNOWN | 7.80 | 1500 | J |
| 3. | UNKNOWN ALKANE | 9.11 | 1100 | J |
| 4. | UNKNOWN | 10.37 | 10000 | J |
| 5. | UNKNOWN | 10.45 | 3800 | J |
| 6. | UNKNOWN ALKANE | 10.94 | 5000 | J |
| 7. | UNKNOWN ALKANE | 11.32 | 2300 | j |
| 8. | UNKNOWN ALKANE | 12.86 | 820 | J |
| 9. | UNKNOWN | 17.74 | 2100 | J |
| 10. | UNKNOWN ALKANE | 20.30 | 840 | J |
| 11. | UNKNOWN ACID | 20.97 | 2900 | J |
| 12. | UNKNOWN ACID | 23.06 | 960 | J |
| 13. | UNKNOWN ACID | 23.22 | 14000 | J |
| 14. | UNKNOWN ACID | 25.26 | 13000 | J |
| 15. | UNKNOWN ALKANE | 26.55 | 3900 | J |
| 16. | UNKNOWN ALKANE | 27.63 | 4100 | J |
| 17. | UNKNOWN ALKANE | 28.87 | 3700 | J |
| 18. | UNKNOWN ALKANE | 30.37 | 4500 | J |
| 19. | UNKNOWN | 34.35 | 13000 | J |
| 20. | UNKNOWN | 40.47 | Į. | J |
| 21. | UNKNOWN | 47.71 | | J |
| | | | | |

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| Lab Name: <u>NYTEST EN</u> | V INC | Contract | 9320470 | | 5-1 |
|----------------------------|------------------------|----------|------------|------|----------|
| Lab Code: NYTEST | Case No.: <u>18547</u> | SAS No.: | | SDG | No.: |
| Matrix: (soil/water |) <u>soil</u> | | Lab Sample | ID: | 1854707 |
| Sample wt/vol: | 30.0 (g/mL) G | - | Lab File I | D: | F7611 |
| Level: (low/med) | LOW | | Date Recei | ved: | 10/14/93 |

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/kg) $\underline{\text{UG/kG}}$ Q

| | | |
|--------------------------------------|-------------|---|
| 108-95-2Phenol | 330 | J |
| 111-44-4bis(2-Chloroethyl)Ether | 1300 | U |
| 95-57-82-Chlorophenol | 1300 | ט |
| 541-73-11,3-Dichlorobenzene | 1300 | U |
| 106-46-71,4-Dichlorobenzene | 1300 | ט |
| 95-50-11,2-Dichlorobenzene | 1300 | ប |
| 95-48-72-Methylphenol | 1300 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane) | 1300 | ט |
| 106-44-54-Methylphenol_ | 1300 | U |
| 621-64-7N-Nitroso-di-n-propylamine | 1300 | U |
| 67-72-1Hexachloroethane | 1300 | U |
| 98-95-3Nitrobenzene | 1300 | U |
| 78-59-1Isophorone | 1300 | ט |
| 88-75-52-Nitrophenol | 1300 | ט |
| 105-67-92,4-Dimethylphenol | 1300 | U |
| 111-91-1bis(2-Chloroethoxy)methane | 1300 | ט |
| 120-83-22,4-Dichlorophenol | 1300 | ט |
| 120-82-11,2,4-Trichlorobenzene | 1300 | ט |
| 91-20-3Naphthalene | 1300 | ט |
| 106-47-84-Chloroaniline | 1300 | ט |
| 87-68-3Hexachlorobutadiene | 1300 | บ |
| 59-50-74-Chloro-3-methylphenol | 1300 | ט |
| 91-57-62-Methylnaphthalene | 1300 | บ |
| 77-47-4Hexachlorocyclopentadiene | 1300 | υ |
| 88-06-22,4,6-Trichlorophenol | 1300 | U |
| 95-95-42,4,5-Trichlorophenol | 3300 | U |
| 91-58-72-Chloronaphthalene | 1300 | ט |
| 88-74-42-Nitroaniline | 3300 | U |
| 131-11-3Dimethylphthalate | 280 | J |
| 208-96-8Acenaphthylene | 1300 | บ |
| 606-20-22,6-Dinitrotoluene | 1200 | J |
| 99-09-23-Nitroaniline | 3300 | ט |
| 83-32-9Acenaphthene | 1300 | บ |
| | | İ |

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FORM I SV-1

3/90 ATTACHMENT W

GPC Cleanup: (Y/N) Y pH: 7.2

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CONCENTRATION UNITS:

| | i | |
|-------------------------------------|------|----|
| 51-28-52,4-Dinitrophenol | 3300 | ט |
| 100-02-74-Nitrophenol | 3300 | ប |
| 132-64-9Dibenzofuran | 1300 | U |
| 121-14-22,4-Dinitrotoluene | 1300 | ט |
| 84-66-2Diethylphthalate | 150 | J |
| 7005-72-34-Chlorophenyl-phenylether | 1300 | ប |
| 86-73-7Fluorene | 1300 | ט |
| 100-01-64-Nitroaniline | 3300 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 3300 | שׁ |
| 86-30-6N-Nitrosodiphenylamine (1) | 1300 | U |
| 101-55-34-Bromophenyl-phenylether | 1300 | ט |
| 118-74-1Hexachlorobenzene | 1300 | ט |
| 87-86-5Pentachlorophenol | 3300 | ט |
| 85-01-8Phenanthrene | 410 | J |
| 120-12-7Anthracene | 1300 | ט |
| 86-74-8Carbazole | 1300 | ט |
| 84-74-2Di-n-Butylphthalate | 330 | J |
| 206-44-0Fluoranthene | 390 | J |
| 129-00-0Pyrene | 1300 | ט |
| 85-68-7Butylbenzylphthalate | 810 | J |
| 91-94-13,3'-Dichlorobenzidine | 1300 | ט |
| 56-55-3Benzo(a) anthracene | 1300 | ט |
| 218-01-9Chrysene | 1300 | ט |
| 117-81-7bis(2-Ethylhexyl)phthalate | 4300 | В |
| 117-84-0Di-n-octylphthalate | 190 | J |
| 205-99-2Benzo(b) fluoranthene | 1300 | U |
| 207-08-9Benzo(k) fluoranthene | 1300 | ט |
| 50-32-8Benzo(a)pyrene | 1300 | ט |
| 193-39-5Indeno(1,2,3-cd)pyrene | 1300 | Ū |
| 53-70-3Dibenz(a,h)anthracene | 1300 | Ü |
| 191-24-2Benzo(q,h,i)perylene | 1300 | U |

s-7

| Lab | Name: | NYTEST | ENV | INC | Contract: | 9320470 | |
|-----|-------|--------|-----|-----|-----------|---------|--|

Lab Code: NYTEST Case No.: 18547 SAS No.: _____ SDG No.: ____

Lab Sample ID: <u>1854707</u> Matrix: (soil/water) SOIL

Lab File ID: F7611 Sample wt/vol: 30.0 (g/mL) G

Date Received: <u>10/14/93</u> Level: (low/med) LOW__

% Moisture: 51 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: 2.0

GPC Cleanup: $(Y/N) \underline{Y}$ pH: $\underline{7.2}$

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG Number TICs found: 21

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.77 | 5100 | JAB |
| 2. | UNKNOWN | 10.40 | 4400 | J |
| 3. | UNKNOWN | 10.64 | 50000 | J |
| 4. | UNKNOWN | 12.16 | 7200 | J |
| 5. | UNKNOWN | 12.65 | 2600 | J |
| 6. | UNKNOWN | 12.91 | 9400 | J |
| 7. | UNKNOWN | 16.78 | 6900 | J |
| 8. | UNKNOWN | 18.32 | 4300 | J |
| 9. | UNKNOWN ALKANE | 20.48 | 2600 | J |
| 10. | UNKNOWN ACID | 21.19 | 5700 | J |
| 11. | UNKNOWN ALKANE | 22.76 | 4200 | J |
| 12. | UNKNOWN ACID | 23.41 | 4600 | J |
| 13. | UNKNOWN ALKANE | 23.82 | 2800 | J |
| 14. | UNKNOWN | 24.22 | 3000 | J |
| 15. | UNKNOWN ALKANE | 24.84 | 2700 | J |
| 16. | UNKNOWN ALKANE | 26.79 | 11000 | J |
| 17. | UNKNOWN ALKANE | 27.20 | 4200 | J |
| 18. | UNKNOWN | 27.93 | 5900 | J |
| 19. | UNKNOWN ALKANE | 29.22 | 15000 | J |
| 20. | UNKNOWN ALKANE | 30.79 | 20000 | J |
| 21. | UNKNOWN ALKANE | 34.96 | 2700 | J |
| | | 1 | | 1- |

Lab Name: NYTEST ENV INC Contract: 9320470

Matrix: (soil/water) SOIL Lab Sample ID: 1854708

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7603

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 32 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.3</u>

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| | | 1 |
|---------------------------------------|------|----|
| 108-95-2Phenol | 1300 | J |
| 111-44-4bis(2-Chloroethyl)Ether | 1900 | ט |
| 95-57-82-Chlorophenol | 1900 | ט |
| 541-73-11,3-Dichlorobenzene | 1900 | ט |
| 106-46-71,4-Dichlorobenzene | 1900 | ט |
| 95-50-11,2-Dichlorobenzene | 1900 | ט |
| 95-48-72-Methylphenol | 1900 | ט |
| 108-60-12,2'-oxybis(1-Chloropropane)_ | 1900 | שׁ |
| 106-44-54-Methylphenol | 1900 | ט |
| 621-64-7N-Nitroso-di-n-propylamine | 1900 | U |
| 67-72-1Hexachloroethane | 1900 | ט |
| 98-95-3Nitrobenzene | 1900 | U |
| 78-59-1Isophorone | 1900 | U |
| 88-75-52-Nitrophenol | 1900 | ָט |
| 105-67-92,4-Dimethylphenol | 1900 | ប |
| 111-91-1bis(2-Chloroethoxy)methane | 1900 | ט |
| 120-83-22,4-Dichlorophenol_ | 1900 | U |
| 120-82-11,2,4-Trichlorobenzene | 1900 | ט |
| 91-20-3Naphthalene | 1200 | J |
| 106-47-84-Chloroaniline | 1900 | ט |
| 87-68-3Hexachlorobutadiene | 1900 | ט |
| 59-50-74-Chloro-3-methylphenol | 1900 | บ |
| 91-57-62-Methylnaphthalene | 480 | J |
| 77-47-4Hexachlorocyclopentadiene | 1900 | บ |
| 38-06-22,4,6-Trichlorophenol | 1900 | บ |
| 95-95-42,4,5-Trichlorophenol | 4700 | บ |
| 91-58-72-Chloronaphthalene | 1900 | ט |
| 38-74-42-Nitroaniline | 4700 | U |
| 131-11-3Dimethylphthalate | 1300 | J |
| 208-96-8Acenaphthylene | 760 | J |
| 506-20-22,6-Dinitrotoluene | 2000 | ١ |
| 99-09-23-Nitroaniline | 4700 | ט |
| 33-32-9Acenaphthene | 770 | J |
| | l '' | ٦ |

| s-8 |
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| Lab Name: NYTEST ENV INC Contract | : 9320470 | |
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| | | |
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: | |
| Matrix: (soil/water) SOIL | Lab Sample ID: <u>1854708</u> | - |
| sample wt/vol: 30.0 (g/mL) G | Lab File ID: <u>F7603</u> | |
| Level: (low/med) LOW | Date Received: 10/14/93 | |
| % Moisture: 32 decanted: (Y/N) N | Date Extracted: 10/18/93 | |
| Concentrated Extract Volume: 500.0 (uL) | Date Analyzed: 10/28/93 | |
| Injection Volume:2.0(uL) | Dilution Factor: 4.0 | |

GPC Cleanup: (Y/N) Y pH: 7.3 CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

| 51-28-5 | 2,4-Dinitrophenol_ | 4700 | ט |
|-----------|-----------------------------|------|----------|
| | 4-Nitrophenol | 4700 | ש |
| | Dibenzofuran | 540 | J |
| | 2,4-Dinitrotoluene | 1900 | U |
| | Diethylphthalate | 350 | J |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 1900 | U |
| | Fluorene | 920 | J |
| 100-01-6 | 4-Nitroaniline | 4700 | ט |
| 534-52-1 | 4,6-Dinitro-2-methylphenol_ | 4700 | ט |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 1900 | ַט |
| 101-55-3 | 4-Bromophenyl-phenylether | 1900 | ū |
| | Hexachlorobenzene | 1900 | ט |
| 87-86-5 | Pentachlorophenol | 4700 | ש |
| 85-01-8 | Phenanthrene | 5800 | |
| 120-12-7 | Anthracene | 1500 | J |
| 86-74-8 | Carbazole | 1900 | ט |
| 84-74-2 | Di-n-Butylphthalate | 470 | J |
| 206-44-0 | Fluoranthene | 6400 | i |
| 129-00-0 | Pyrene | 7600 | |
| 85-68-7 | Butylbenzylphthalate | 280 | J |
| | 3,3'-Dichlorobenzidine | 1900 | ט |
| 56-55-3 | Benzo(a)anthracene | 3700 | |
| 218-01-9 | Chrysene | 4800 | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 3600 | В |
| | Di-n-octylphthalate | 1900 | ט |
| | Benzo(b) fluoranthene | 3200 | |
| 207-08-9 | Benzo(k)fluoranthene | 3200 | . |
| _ | Benzo(a)pyrene | 3700 | 513 |
| | Indeno(1,2,3-cd)pyrene | 2600 | |
| | Dibenz(a,h)anthracene | 1900 | บ |
| | Benzo(g,h,i)perylene | 2500 | - 1 |

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| s-8 |
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| | | S-8 |
|--------------------------|--------------------------|-----|
| Lab Name: NYTEST ENV INC | Contract: <u>9320470</u> | |

Matrix: (soil/water) SOIL Lab Sample ID: 1854708

Sample wt/vol: $30.0 \text{ (g/mL)} \underline{G}$ Lab File ID: $\underline{F7603}$

Level: (low/med) <u>LOW</u> Date Received: $\underline{10/14/93}$

% Moisture: 32 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL) Dilution Factor: ____4.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

Number TICs found: 21 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.85 | 13000 | JAB |
| 2. | UNKNOWN | 10.49 | 4100 | J |
| 3. | UNKNOWN | 10.59 | 20000 | J |
| 4. | UNKNOWN | 10.68 | 27000 | J |
| 5. | UNKNOWN | 12.99 | 1700 | J |
| 6. | UNKNOWN ACID | 16.05 | 1300 | J |
| 7. | UNKNOWN ALKANE | 16.84 | 7500 | J |
| 8. | UNKNOWN | 17.28 | 1700 | J |
| 9. | UNKNOWN | 17.96 | 3500 | J |
| 10. | UNKNOWN | 19.99 | 1300 | J |
| 11. | UNKNOWN ALKANE | 20.52 | 1600 | J |
| 12. | UNKNOWN | 20.60 | 2000 | J |
| 13. | UNKNOWN ACID | 21.21 | 1600 | J |
| 14. | UNKNOWN ACID | 23.45 | 3900 | J |
| 15. | UNKNOWN ACID | 23.45 | 2500 | J |
| 16. | UNKNOWN ALKANE | 26.81 | 3700 | J |
| 17. | UNKNOWN ALKANE | 27.93 | 4000 | J |
| 18. | UNKNOWN ALKANE | 29.24 | 3900 | J |
| 19. | UNKNOWN ALKANE | 30.81 | 6600 | J |
| 20. | UNKNOWN | 34.99 | 5400 | J |
| 21. | UNKNOWN | 41.42 | 3900 | J |

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

S-8RE Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: ____ Lab Sample ID: <u>1854708</u> Matrix: (soil/water) SOIL Lab File ID: F7612 Sample wt/vol: 30.0 (g/mL) G Date Received: 10/14/93 Level: (low/med) LOW_ % Moisture: 32 decanted: (Y/N) N Date Extracted: 10/18/93 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: _____2.0(uL)

Dilution Factor: 4.0

GPC Cleanup: $(Y/N) \underline{Y}$ pH: $\underline{7.3}$

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u>

| | | T |
|---|--|---------|
| .08-95-2Phenol | 1300 | J |
| 11-44-4bis(2-Chloroethyl)Ether | 1900 | ט |
| 5-57-82-Chlorophenol | 1900 | บ |
| 41-73-11,3-Dichlorobenzene | 1900 | ט |
| 06-46-71,4-Dichlorobenzene | 1900 | U |
| 5-50-11,2-Dichlorobenzene | 1900 | U |
| 5-48-72-Methylphenol | 1900 | ט |
| .08-60-12,2'-oxybis(1-Chloropropane)_ | 1900 | บ |
| 06-44-54-Methylphenol | 1900 | υ |
| 21-64-7N-Nitroso-di-n-propylamine | 1900 | U |
| 57-72-1Hexachloroethane | 1900 | υ |
| 98-95-3Nitrobenzene | 1900 | ប |
| 78-59-1Isophorone | 1900 | U |
| 38-75-52-Nitrophenol | 1900 | ט |
| 105-67-92,4-Dimethylphenol | 1900 | ט |
| 111-91-1bis(2-Chloroethoxy)methane | 1900 | ט |
| 120-83-22,4-Dichlorophenol | 1900 | บ |
| 120-83-22,4-Dichiotophenor | 1900 | ט |
| | 1400 | J |
| 91-20-3Naphthalene 106-47-84-Chloroaniline | 1900 | U |
| | 1900 | U |
| 87-68-3Hexachlorobutadiene | 1900 | u |
| 59-50-74-Chloro-3-methylphenol | 470 | J |
| 91-57-62-Methylnaphthalene | 1900 | U |
| 77-47-4Hexachlorocyclopentadiene | 1900 | U |
| 88-06-22,4,6-Trichlorophenol | 4700 | U |
| 95-95-42,4,5-Trichlorophenol | 1900 | บ |
| 91-58-72-Chloronaphthalene | -\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | la o |
| 88-74-42-Nitroaniline | _ | - |
| 131-11-3Dimethylphthalate | 1100 | J |
| 208-96-8Acenaphthylene | _ 580 | J |
| 606-20-22,6-Dinitrotoluene | 2200 | 1 |
| 99-09-23-Nitroaniline | 4700 | ū |
| 83-32-9Acenaphthene | 660 | J |

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S-8RE Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: ____ Lab Sample ID: <u>1854708</u> Matrix: (soil/water) SOIL Sample wt/vol: 30.0 (g/mL) GLab File ID: F7612 Date Received: <u>10/14/93</u> Level: (low/med) LOW % Moisture: 32 decanted: (Y/N) N Date Extracted: 10/18/93 Date Analyzed: 10/28/93 Concentrated Extract Volume: 500.0 (uL) Dilution Factor: ____4.0 Injection Volume: 2.0(uL) GPC Cleanup: (Y/N) Y pH: 7.3CONCENTRATION UNITS: COMPOUND (ug/L or ug/Kg) UG/KG CAS NO.

| | | 1 |
|-------------------------------------|------|-------|
| 51-28-52,4-Dinitrophenol | 4700 | U |
| 100-02-74-Nitrophenol | 4700 | ט |
| 132-64-9Dibenzofuran | 460 | J |
| 121-14-22,4-Dinitrotoluene | 1900 | ש |
| 84-66-2Diethylphthalate | 310 | J |
| 7005-72-34-Chlorophenyl-phenylether | 1900 | ט |
| 86-73-7Fluorene | 860 | J |
| 100-01-64-Nitroaniline | 4700 | ט |
| 534-52-14,6-Dinitro-2-methylphenol | 4700 | ט |
| 86-30-6N-Nitrosodiphenylamine (1) | 1900 | ט |
| 101-55-34-Bromophenyl-phenylether | 1900 | ט |
| 118-74-1Hexachlorobenzene | 1900 | ט |
| 87-86-5Pentachlorophenol | 4700 | ט |
| 85-01-8Phenanthrene | 6300 | |
| 120-12-7Anthracene | 1200 | J |
| 86-74-8Carbazole | 1900 | ט |
| 84-74-2Di-n-Butylphthalate | 470 | J |
| 206-44-0Fluoranthene | 6800 | |
| 129-00-0Pyrene | 7700 | |
| 85-68-7Butylbenzylphthalate | 240 | J |
| 91-94-13,3'-Dichlorobenzidine | 1900 | ט |
| 56-55-3Benzo(a)anthracene | 3700 | |
| 218-01-9Chrysene | 4800 | |
| 117-81-7bis(2-Ethylhexyl)phthalate | 3900 | В |
| 117-84-0Di-n-octylphthalate | 1900 | ซ |
| 205-99-2Benzo(b) fluoranthene | 4000 | |
| 207-08-9Benzo(k) fluoranthene | 3400 | |
| 50-32-8Benzo(a)pyrene | 3700 | 23 |
| 193-39-5Indeno(1,2,3-cd)pyrene | 2800 | 1,000 |
| 53-70-3Dibenz(a,h)anthracene | 1900 | บ |
| 191-24-2Benzo(g,h,i)perylene | 2600 | |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

S-8RE

Lab Name: NYTEST ENV INC Contract: 9320470

Lab Code: NYTEST | Case No.: 18547 | SAS No.: _____ SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1854708

Sample wt/vol: 30.0 (g/mL) \underline{G} Lab File ID: $\underline{F7612}$

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 32 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/28/93

Injection Volume: 2.0(uL) Dilution Factor: 4.0

GPC Cleanup: $(Y/N) \underline{Y}$ pH: $\underline{7.3}$

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

Number TICs found: 21

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|----------------|-------|------------|-----|
| 1. | UNKNOWN | 6.80 | 15000 | JAB |
| 2. | UNKNOWN | 9.97 | 7000 | J |
| 3. | UNKNOWN | 10.47 | 4400 | J |
| 4. | UNKNOWN | 10.58 | 18000 | J |
| 5. | UNKNOWN | 10.65 | 19000 | J |
| 6. | UNKNOWN | 16.81 | 7200 | J |
| 7. | UNKNOWN | 17.18 | 1600 | J |
| 8. | UNKNOWN | 17.28 | 1800 | J |
| 9. | UNKNOWN | 17.95 | 3100 | J |
| 10. | UNKNOWN | 20.59 | 2300 | J |
| 11. | UNKNOWN | 21.20 | 1800 | J |
| 12. | UNKNOWN ACID | 22.79 | 1600 | J |
| 13. | UNKNOWN ACID | 23.44 | 4100 | J |
| 14. | UNKNOWN ACID | 25.48 | 2600 | J |
| 15. | UNKNOWN ALKANE | 26.80 | 15000 | J |
| 16. | UNKNOWN ALKANE | 27.92 | 14000 | J |
| 17. | UNKNOWN ALKANE | 29.23 | 17000 | J |
| 18. | UNKNOWN ALKANE | 30.79 | 27000 | J |
| 19. | UNKNOWN ALKANE | 32.70 | 14000 | J |
| 20. | UNKNOWN | 34.94 | 25000 | J |
| 21. | UNKNOWN | 41.37 | 18000 | J |
| | 1 | i | 1 | |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

| Lab | Name: | NYTEST E | env | INC | Contract: | 9320470 | l | |
|-----|-------|----------|-----|-----|-----------|---------|---|--|
| | | | | | | | | |

Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: ____

Matrix: (soil/water) SOIL Lab Sample ID: 1854709

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F7625

Level: (low/med) LOW Date Received: 10/14/93

% Moisture: 21 decanted: (Y/N) N Date Extracted: 10/18/93

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 10/29/93

Injection Volume: 2.0(uL) Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/kg) <u>ug/kg</u> Q

| | 1 | |
|---------------------------------------|------|--------------|
| 108-95-2Phenol | 3300 | U |
| 111-44-4bis(2-Chloroethyl)Ether | 3300 | U |
| 95-57-82-Chlorophenol | 3300 | ប |
| 541-73-11,3-Dichlorobenzene | 3300 | ប |
| 106-46-71,4-Dichlorobenzene | 3300 | ט |
| 95-50-11,2-Dichlorobenzene | 3300 | U |
| 95-48-72-Methylphenol | 3300 | บ |
| 108-60-12,2'-oxybis(1-Chloropropane)_ | 3300 | ซ |
| 106-44-54-Methylphenol | 3300 | ប |
| 621-64-7N-Nitroso-di-n-propylamine | 3300 | ט |
| 67-72-1Hexachloroethane | 3300 | ט |
| 98-95-3Nitrobenzene | 3300 | ប |
| 78-59-1Isophorone | 3300 | ប |
| 88-75-52-Nitrophenol | 3300 | ט |
| 105-67-92,4-Dimethylphenol | 3300 | υ |
| 111-91-1bis(2-Chloroethoxy)methane | 3300 | ט |
| 120-83-22,4-Dichlorophenol | 3300 | ט |
| 120-82-11,2,4-Trichlorobenzene | 3300 | ט |
| 91-20-3Naphthalene | 810 | J |
| 106-47-84-Chloroaniline | 3300 | U |
| 87-68-3Hexachlorobutadiene | 3300 | U |
| 59-50-74-Chloro-3-methylphenol | 3300 | U |
| 91-57-62-Methylnaphthalene | 590 | J |
| 77-47-4Hexachlorocyclopentadiene | 3300 | U |
| 88-06-22,4,6-Trichlorophenol | 3300 | ן ט |
| 95-95-42,4,5-Trichlorophenol | 8100 | ט |
| 91-58-72-Chloronaphthalene | 3300 | U |
| 88-74-42-Nitroaniline | 8100 | U |
| 131-11-3Dimethylphthalate | 3300 | U |
| 208-96-8Acenaphthylene | 660 | J |
| 606-20-22,6-Dinitrotoluene | 3300 | U |
| 99-09-23-Nitroaniline | 8100 | U |
| 83-32-9Acenaphthene | 2400 | J |
| 00 02 7 Remaphatient | | |
| | | |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

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GPC Cleanup: (Y/N) Y pH: 7.3

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

CONCENTRATION UNITS:

| | | · · | T |
|-----------|----------------------------|-------|-----|
| 51-28-5 | 2,4-Dinitrophenol | 8100 | υ |
| 100-02-7 | 4-Nitrophenol | 8100 | ប |
| 132-64-9 | Dibenzofuran | 1600 | J |
| 121-14-2 | 2,4-Dinitrotoluene | 3300 | ַ |
| 84-66-2 | Diethylphthalate | 3300 | ט |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 3300 | U |
| 86-73-7 | Fluorene | 2900 | J |
| 100-01-6 | 4-Nitroaniline | 8100 | ט |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 8100 | ט |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 3300 | ט |
| | 4-Bromophenyl-phenylether | 3300 | ט |
| 118-74-1 | Hexachlorobenzene | 3300 | ט |
| 87-86-5 | Pentachlorophenol | 8100 | ט |
| 85-01-8 | Phenanthrene | 17000 | |
| 120-12-7 | Anthracene | 4200 | 1 |
| 86-74-8 | Carbazole | 1400 | J |
| 84-74-2 | Di-n-Butylphthalate | 3300 | ט |
| 206-44-0 | Fluoranthene | 19000 | |
| 129-00-0 | Pyrene | 13000 | |
| 85-68-7 | Butylbenzylphthalate | 3300 | ט |
| 91-94-1 | 3,3'-Dichlorobenzidine | 3300 | ט |
| 56-55-3 | Benzo(a)anthracene | 8800 | |
| 218-01-9 | | 8300 | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 1500 | BJ |
| 117-84-0 | Di-n-octylphthalate | 3300 | U |
| | Benzo(b)fluoranthene | 6200 | |
| | Benzo(k)fluoranthene | 4100 | 2.3 |
| | Benzo(a)pyrene | 6500 | |
| | Indeno(1,2,3-cd)pyrene | 3300 | J |
| | Dibenz(a,h)anthracene | 3300 | U |
| | Benzo(g,h,i)perylene | 2800 | J |
| | | | _ |

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

| s-9 | |
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| Lab Name: NYTEST ENV | INC Contract | : <u>9320470</u> | |
|----------------------|--------------------------------|------------------|----------|
| Lab Code: NYTEST | Case No.: <u>18547</u> SAS No. | : SDG 1 | No.: |
| Matrix: (soil/water) | SOIL | Lab Sample ID: | 1854709 |
| Sample wt/vol: | 30.0 (g/mL) G | Lab File ID: | F7625 |
| Level: (low/med) | LOW | Date Received: | 10/14/93 |
| % Moisture: 21 | decanted: (Y/N) N | Date Extracted: | 10/18/93 |
| Concentrated Extract | Volume: 500.0 (uL) | Date Analyzed: | 10/29/93 |

Injection Volume: _____2.0(uL)

Dilution Factor: 8.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

Number TICs found: 17 (ug/L or ug/Kg) UG/KG

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|------------------------------|-------|------------|-----|
| 1. | UNKNOWN | 6.76 | 22000 | JAB |
| 2. | UNKNOWN | 10.50 | 3100 | J |
| 3. | UNKNOWN AROMATIC HYDROCARBON | 17.55 | 930 | J |
| 4. | UNKNOWN | 20.02 | 950 | J |
| 5. | UNKNOWN AROMATIC HYDROCARBON | 23.37 | 1100 | J |
| 6. | UNKNOWN AROMATIC HYDROCARBON | 23.43 | 1000 | J |
| 7. | UNKNOWN AROMATIC HYDROCARBON | 24.85 | 740 | J |
| 8. | UNKNOWN AROMATIC HYDROCARBON | 26.47 | 2200 | J |
| 9. | UNKNOWN AROMATIC HYDROCARBON | 26.79 | 3900 | J |
| 10. | UNKNOWN AROMATIC HYDROCARBON | 27.00 | 1200 | J |
| 11. | UNKNOWN AROMATIC HYDROCARBON | 27.12 | 2200 | J |
| 12. | UNKNOWN AROMATIC HYDROCARBON | 27.51 | 970 | J |
| 13. | UNKNOWN | 28.00 | 1300 | J |
| 14. | UNKNOWN | 28.50 | 1200 | J |
| 15. | UNKNOWN | 28.93 | 700 | J |
| 16. | UNKNOWN AROMATIC HYDROCARBON | 29.05 | 720 | J |
| 17. | UNKNOWN | 29.28 | 950 | J |

EPA SAMPLE NO.

| Lab Name: NYTEST ENV INC Contract: | 9320470 | 2-1 | |
|--|------------------------|---|---|
| Lab Code: NYTEST Case No.: 18547 SAS No.: | SDG 1 | No.: | |
| | Lab Sample ID: | | |
| Macrix. (Borr, wasse) | | | |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: | | |
| % Moisture: 13 decanted: (Y/N) N | Date Received: | 10/14/93 | |
| Extraction: (SepF/Cont/Sonc) SONC | Date Extracted: | 10/15/93 | |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: | 10/28/93 | |
| Injection Volume: 1.00 (uL) | Dilution Factor | : 2.00 | |
| GPC Cleanup: (Y/N) Y pH: 7.0 | Sulfur Cleanup: | (Y/N) <u>Y</u> | |
| CONCEN | TRATION UNITS: | | |
| CAS NO. COMPOUND (ug/L | or ug/Kg) <u>UG/KG</u> | <u>i</u> , Q | |
| 319-84-6beta-BHC 319-85-7beta-BHC 319-86-8beta-BHC 319-86-8beta-BHC 58-89-9gamma-BHC (Lindane) 76-44-8Heptachlor 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-94,4'-DDE 72-20-8Endosulfan II 72-54-8Endosulfan II 72-54-8 | | 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 3.9 U 7.6 U 7.6 U 7.6 U 7.6 U 7.6 U 39 U 3.9 U 7.6 U | |
| 11097-69-1Aroclor-1254 | | 76 U | ļ |
| 11096-82-5Aroclor-1260 | | 170 |] |

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S-10 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 1854710 Sample wt/vol: 30.0 (g/mL) GLab File ID: % Moisture: 18 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: _____5000 (uL) Date Analyzed: 10/30/93 Injection Volume: 1.00 (uL) Dilution Factor: 3.00 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG. Q | 319-84-6----alpha-BHC_____| 6.2|U | 319-85-7----beta-BHC 6.2|U | 319-86-8-----delta-BHC 6.2|U | 58-89-9----gamma-BHC (Lindane)____ 6.2|U 76-44-8-----Heptachlor 6.2|U | 309-00-2----Aldrin 6.2|U | 1024-57-3-----Heptachlor epoxide_____| 6.2 U | 959-98-8-----Endosulfan I_____ 6.2 | U | 60-57-1-----Dieldrin 13 l P 72-55-9----4,4'-DDE 88 | P | 72-20-8-----Endrin 12 U | 33213-65-9-----Endosulfan II____ 12 ן ט 72-54-8-----4,4'-DDD 30 1031-07-8----Endosulfan sulfate 12 | U 1 50-29-3----4,4'-DDT 13 P 72-43-5-----Methoxychlor 62 ľ | 53494-70-5----Endrin ketone 12 | U | 7421-93-4----Endrin aldehyde_____ 12 JP | 5103-71-9----alpha-Chlordane_____ 6.2 U | 5103-74-2----gamma-Chlordane 6.2 U | 8001-35-2----Toxaphene 620 U | 12674-11-2----Aroclor-1016____ 120 U 11104-28-2----Aroclor-1221 250 U 11141-16-5-----Aroclor-1232 120 U 53469-21-9-----Aroclor-1242_____ 120 U | 12672-29-6----Aroclor-1248_____ 120 U 11097-69-1----Aroclor-1254____ 120 U 11096-82-5----Aroclor-1260 170 | P

| Matrix: (soil/water) SOIL Lab Sample ID: 1854702 |
|--|
| Sample wt/vol: 30.0 (g/mL) G Lab File ID: % Hoisture: 14 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/28/93 Injection Volume: 1.00 (uL) Dilution Factor: 4.00 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG 0 319-84-6alpha-BHC |
| % Moisture: 14 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/28/93 Injection Volume: 1.00 (uL) Dilution Factor: 4.00 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG O |
| Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/28/93 Injection Volume: 1.00 (uL) Dilution Factor: 4.00 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 319-84-6alpha-BHC 7.9 U 319-85-7beta-BHC 7.9 U 319-86-8delta-BHC 7.9 U 7.9 U 76-44-8Heptachlor 7.9 U 309-00-2Aldrin 7.9 U 309-00-2Aldrin 7.9 U 1024-57-3 |
| Date Analyzed: 10/28/93 Injection Volume: 1.00 (uL) Dilution Factor: 4.00 |
| Dilution Factor: 4.00 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTATION UNITS: (ug/L or ug/Kg) UG/KG Q CONCENTAT |
| CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CAS NO. COMPOUND CONCENTRATION UNITS: CONCENTRATION UNITES: CO |
| CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q |
| CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q |
| 319-84-6alpha-BHC |
| 319-85-7beta-BHC |
| 50-29-34,4'-DDT |

S-3 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: ____ Lab Sample ID: 1854703 Matrix: (soil/water) SOIL Sample wt/vol: <u>30.0</u> (g/mL) <u>G</u> Lab File ID: % Moisture: 24 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/28/93 Injection Volume: 1.00 (uL) Dilution Factor: ___6.00 GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q 319-84-6----alpha-BHC 13 U 319-85-7-----beta-BHC 13 ΙU | 319-86-8-----delta-BHC 13 ľ | 58-89-9-----gamma-BHC (Lindane)_ ___ 13 U 76-44-8------Heptachlor____ 13 U | 309-00-2----Aldrin_ 13 ΙU 1 1024-57-3-----Heptachlor epoxide 13 ľŪ | 959-98-8-----Endosulfan I_____ 13 U | 60-57-1-----Dieldrin_____ 26 ľ 72-55-9-----4,4'-DDE____ 26 ΙU | 72-20-8-----Endrin 26 U | 33213-65-9----Endosulfan II____ 26 U 72-54-8-----4,4'-DDD_ 26 ΙU 1031-07-8----Endosulfan sulfate 26 U | 50-29-3----4,4'-DDT 26 U 72-43-5-----Methoxychlor____ 130 ΙU | 53494-70-5----Endrin ketone 26 U | 7421-93-4----Endrin aldehyde____ 26 U 5103-71-9----alpha-Chlordane____ 13 ΙU 5103-74-2----gamma-Chlordane____ 13 U 8001-35-2----Toxaphene 1300 U 12674-11-2----Aroclor-1016_____ 260 ΙU 11104-28-2----Aroclor-1221 530 U 11141-16-5----Aroclor-1232_____ 260 U 53469-21-9----Aroclor-1242 260 ľ 12672-29-6----Aroclor-1248 260 ΙU | 11097-69-1----Aroclor-1254____ 260 ΙU 11096-82-5----Aroclor-1260 240 IJ

S-4 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 1854704 Sample wt/vol: 30.0 (g/mL) G Lab File ID: % Moisture: 36 ____ decanted: (Y/N) N___ Date Received: <u>10/14/93</u> Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/29/93 Injection Volume: 1.00 (uL) Dilution Factor: 6.00 GPC Cleanup: (Y/N) Y pH: 7.0Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: COMPOUND · CAS NO. (ug/L or ug/Kg) UG/KG Q 319-84-6----alpha-BHC_____ U 16 | 319-85-7-----beta-BHC 16 U 319-86-8-----delta-BHC___ 16 U | 58-89-9----gamma-BHC (Lindane)_____ 16 U 76-44-8-----Heptachlor____ 16 U | 309-00-2----Aldrin 16 U 1024-57-3-----Heptachlor epoxide____ 16 l U | 959-98-8----Endosulfan I_____ 16 U | 60-57-1-----Dieldrin_ 31 | P 72-55-9----4,4'-DDE 19 J | 72-20-8-----Endrin 31 U 33213-65-9----Endosulfan II____ 31 ľŪ | 72-54-8-----4,4'-DDD 31 U | 1031-07-8-----Endosulfan sulfate 31 Įυ | 50-29-3-----4,4'-DDT_ 78 | P 72-43-5-----Methoxychlor 160 | U | 53494-70-5----Endrin ketone_ 31 U | 7421-93-4----Endrin aldehyde_____ 35 1P | 5103-71-9----alpha-Chlordane_____ 16 l U | 5103-74-2----gamma-Chlordane 16 U | 8001-35-2----Toxaphene 1600 U 12674-11-2----Aroclor-1016 310 U 11104-28-2----Aroclor-1221__ 630 U | 11141-16-5----Aroclor-1232 310 U | 53469-21-9----Aroclor-1242 310 U

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| 12672-29-6----Aroclor-1248 |

11096-82-5----Aroclor-1260____

11097-69-1----Aroclor-1254

S-5 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: Matrix: (soil/water) SOIL Lab Sample ID: 1854705 Sample wt/vol: 30.0 (g/mL) G Lab File ID: % Moisture: 37 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/29/93 Injection Volume: 1.00 (uL) Dilution Factor: 10.0 GPC Cleanup: (Y/N) Y pH: 6.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) <u>UG/KG</u> 319-84-6----alpha-BHC_____ 50 I P 319-85-7-----beta-BHC 25 JP | 319-86-8-----delta-BHC 18 JP | 58-89-9----gamma-BHC (Lindane)_____ 27 U | 76-44-8-----Heptachlor____ 27 U | 309-00-2----Aldrin 27 U | 1024-57-3-----Heptachlor epoxide_____| 27 U 959-98-8-----Endosulfan I_____ 27 U | 60-57-1-----Dieldrin | 52 U 72-55-9-----4,4'-DDE_____ 52 U | 72-20-8-----Endrin 52 U | 33213-65-9----Endosulfan II_____ 52 ΙU 1 72-54-8-----4,4'-DDD 52 U | 1031-07-8-----Endosulfan sulfate 52 ΙU 50-29-3-----4,4'-DDT 60 1 72-43-5----Methoxychlor____ 270 ΙU 53494-70-5----Endrin ketone 52 U 7421-93-4----Endrin aldehyde 77 1 | 5103-71-9----alpha-Chlordane____| 27 U 5103-74-2----gamma-Chlordane____ 27 U | 8001-35-2----Toxaphene 2700 ľ 12674-11-2----Aroclor-1016____ 520 U l 11104-28-2----Aroclor-1221 1100 U 11141-16-5----Aroclor-1232 520 U 53469-21-9----Aroclor-1242_____ 520 U 12672-29-6----Aroclor-1248 520 ΙU | 11097-69-1----Aroclor-1254 520 U 11096-82-5----Aroclor-1260____ 520 U

COMPOUND

CAS NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

| Lab Name: NYTEST ENV INC Contract | s-6 | |
|--|-------------------------------|--|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: | |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: <u>1854706</u> | |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: | |
| % Moisture: 34 decanted: (Y/N) N | Date Received: 10/14/93 | |
| Extraction: (SepF/Cont/Sonc) SONC | Date Extracted: 10/15/93 | |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 11/05/93 | |
| Injection Volume: 1.00 (uL) | Dilution Factor:3.00 | |
| GPC Cleanup: (Y/N) <u>Y</u> pH: <u>7.0</u> | Sulfur Cleanup: (Y/N) Y | |

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

| 319-84-6alpha-BHC | 7.7 | ט | |
|-----------------------------|-------|-----|--|
| 319-85-7beta-BHC | 7.7 | ט | |
| 319-86-8delta-BHC | _ 7.7 | ט | |
| 58-89-9gamma-BHC (Lindane) | 7.7 | | |
| 76-44-8Heptachlor | 7.7 | ט | |
| 309-00-2Aldrin | 7.7 | ט | |
| 1024-57-3Heptachlor epoxide | 7.7 | ט | |
| 959-98-8Endosulfan I | 7.7 | ט | |
| 60-57-1Dieldrin | _ 16 | P | |
| 72-55-94,4'-DDE | 15 | ט | |
| 72-20-8Endrin | , | ט | |
| 33213-65-9Endosulfan II | 15 | ט | |
| 72-54-84,4'-DDD | 25 | P - | |
| 1031-07-8Endosulfan sulfate | _ 15 | ט | |
| 50-29-34,4'-DDT | 52 | P | |
| 72-43-5Methoxychlor | _ 77 | ט | |
| 53494-70-5Endrin ketone | 15 | ט | |
| 7421-36-3Endrin aldehyde | | P | |
| 5103-71-9alpha-Chlordane | 7.7 | ט | |
| 5103-74-2gamma-Chlordane | _ 7.7 | ט | |
| 8001-35-2Toxaphene | 770 | ט | |
| 12674-11-2Aroclor-1016 | _ 150 | ט | |
| 11104-28-2Aroclor-1221 | 300 | ט | |
| 11141-16-5Aroclor-1232 | 150 | บ | |
| 53469-21-9Aroclor-1242 | 150 | ប | |
| 12672-29-6Aroclor-1248 | 150 | ט | |
| 11097-69-1Aroclor-1254 | 150 | ט | |
| 11096-82-5Aroclor-1260 | 200 | | |

S-7 Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: Lab Sample ID: Matrix: (soil/water) SOIL 1854707 Sample wt/vol: 30.0 (g/mL) G Lab File ID: % Moisture: 51 decanted: (Y/N) N Date Received: 10/14/93 Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/93 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 10/29/93 Injection Volume: 1.00 (uL) Dilution Factor: 10.0 GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y CONCENTRATION UNITS: COMPOUND (ug/L or ug/Kg) UG/KG CAS NO. Q 319-84-6----alpha-BHC_____ U 35 | 319-85-7----beta-BHC 35 U 319-86-8-----delta-BHC 35 U | 58-89-9----gamma-BHC (Lindane) 35 ΙU | 76-44-8-----Heptachlor_____ 35 U | 309-00-2----Aldrin 35 ΙU | 1024-57-3-----Heptachlor epoxide 35 IU 959-98-8-----Endosulfan I_____ 40 1 | 60-57-1-----Dieldrin 67 U 72-55-9-----4,4'-DDE_____ 67 U | 72-20-8-----Endrin 67 U | 33213-65-9----Endosulfan II 67 ľŪ 72-54-8-----4,4'-DDD 67 U 1031-07-8-----Endosulfan sulfate 67 U 50-29-3-----4,4'-DDT___ 210 l P 72-43-5----Methoxychlor___ 350 U | 53494-70-5----Endrin ketone_ 67 U 7421-93-4----Endrin aldehyde____ 390 | 5103-71-9----alpha-Chlordane 35 ľ 5103-74-2----gamma-Chlordane____ 35 ľŪ 8001-35-2----Toxaphene_ 3500 ľ | 12674-11-2----Aroclor-1016 670 ľ | 11104-28-2----Aroclor-1221____ 1400 U 11141-16-5----Aroclor-1232__ 670 U

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| 53469-21-9----Aroclor-1242

| 11097-69-1----Aroclor-1254

12672-29-6----Aroclor-1248____

11096-82-5----Aroclor-1260

| Lab Name: NYTEST ENV INC Contract | S-8 : <u>9320470</u> |
|---|---------------------------|
| Lab Code: NYTEST Case No.: 18547 SAS No. | : SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> | Lab Sample ID: 1854708 |
| Sample wt/vol: 30.0 (g/mL) G | Lab File ID: |
| % Moisture: 32 decanted: (Y/N) N | Date Received: 10/14/93 |
| Extraction: (SepF/Cont/Sonc) <u>SONC</u> | Date Extracted: 10/15/93 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 10/29/93 |
| Injection Volume: 1.00 (uL) | Dilution Factor: 3.00 |
| GPC Cleanup: (Y/N) Y pH: 7.0 | Sulfur Cleanup: (Y/N) Y |
| | NTRATION UNITS: |
| CAS NO. COMPOUND (ug/L | qr ug/Kg) <u>UG/KG</u> Q |
| 319-84-6beta-BHC 319-85-7beta-BHC 319-86-8delta-BHC 58-89-9gamma-BHC (Lindane) 76-44-8Heptachlor epoxide 309-00-2Aldrin 1024-57-3Heptachlor epoxide 959-98-8Endosulfan I 60-57-1Dieldrin 72-55-9 | 7.5 U |

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FORM I PEST

| Lab Name: NYTEST ENV INC Contract: 9320 | S-9 |
|---|--|
| Lab Code: NYTEST Case No.: 18547 SAS No.: | SDG No.: |
| Matrix: (soil/water) <u>SOIL</u> Lab S | ample ID: <u>1854709</u> |
| Sample wt/vol: 30.0 (g/mL) G Lab F | ile ID: |
| % Moisture: 21 decanted: (Y/N) N Date | Received: <u>10/14/93</u> |
| Extraction: (SepF/Cont/Sonc) <u>SONC</u> Date : | Extracted: <u>10/15/93</u> |
| Concentrated Extract Volume:5000 (uL) Date | Analyzed: <u>10/30/93</u> |
| Injection Volume: 1.00 (uL) Dilut | ion Factor: 3.00 |
| GPC Cleanup: (Y/N) Y pH: 7.0 Sulfu | r Cleanup: (Y/N) Y |
| CONCENTRATION CAS NO. COMPOUND (ug/L or ug | |
| 319-84-6 | 6.5 U 6.5 U 6.5 U 6.5 U 6.5 U 6.5 U 6.5 U 6.5 U 13 U 13 U 12 JP |

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| 11097-69-1----Aroclor-1254 | 11096-82-5----Aroclor-1260

U.S. EPA - CLP

| | | TNORGANIC A | 1 ANALYSES DATA : | SHEET | EPA SAMPLE NO. |
|-----------------|---------------|---------------------|------------------------|------------------|------------------|
| -1- W | | | | | s-1xxx |
| ab Name: NYTE | ST_ENV_INC_ | ··· | Contract: 9 | 320470 | _ |
| ab Code: NYTE | ST Ca | se No.: 185 | 547_ SAS No. | : | SDG No.: 450 |
| atrix (soil/w | ater): SOIL | _ | | Lab Samp | ole ID: 854701 |
| evel (low/med |): LOW_ | _ | | Date Rec | ceived: 10/14/93 |
| Solids: | _87. | 1 | | | |
| Co | ncentration | Units (ug | /L or mg/kg dr | y weight) | : MG/KG |
| | , | 1 | | <u> </u> | 1 |
| | CAS No. | Analyte | Concentration | | |
| | 7429-90-5 | Aluminum | 2280 | - - | i P i |
| | 17440-36-0 | | | | ip i |
| | 7440-38-2 | | 8.2 | □ * | F |
| | 17440-39-3 | Barium | 46.5 | * - | P |
| | 7440-41-7 | Beryllium | 0.21 | וטו — | P |
| | 7440-43-9 | Cadmium | 0.83 | U N* | P |
| | 7440-70-2 | Calcium | 3690 | | [P] |
| | 7440-47-3 | Chromium_ | 13.5 | 1 1 | P |
| | 17440-48-4 | Cobalt | 2.1 | ۱ ۵ ۱ | P |
| | 17440-50-8 | Copper | 39.1 | 1 1 | P |
| | 7439-89-6 | Iron | 7310 | | P |
| | 7439-92-1 | Lead | 96.4 | _ N | [P_ |
| | 7439-95-4 | Magnesium | 981 | B | P_ |
| | 7439-96-5 | Manganese | 52.0 | _ * | [P_ |
| | 7439-97-6 | Mercury | 1.0 | 1_1_ | [IC <u>A</u> |
| | 17440-02-0 | | 4.1 | | P_ |
| | 7440-09-7 | | 399 | שון | _ P |
| | 7782-49-2 | · · | 1.1 | | [F |
| | 7440-22-4 | Silver | 1.6 | B | P_ |
| | 7440-23-5 | | 46.1 | | P_ |
| | 7440-28-0 | | 1.1 | | F_ |
| | 7440-62-2 | · · | 13.1 | | [P_ |
| | 7440-66-6 | · | 97.7 | | [P_ |
| | 5955-70-0 | Cyanide | 0.66 | U | AS |
| olor Before: | GRAY | Clarit | y Before: | · - | Texture: MEDIUM |
| olor After: | PYELLOW | Clarit | y After: CLE | AR_ | Artifacts: |
| omments: S-1 | | | | - | |

FORM I - IN

ILMO2.1

U.S. EPA - CLP EPA SAMPLE NO. INORGANIC ANALYSES DATA SHEET S-10XX Lab Name: NYTEST ENV INC Contract: 9320470 Lab Code: NYTEST SDG No.: 450 Case No.: 18547 SAS No.: Matrix (soil/water): SOIL Lab Sample ID: 854710 Level (low/med): Date Received: 10/14/93 LOW % Solids: 82.4 Concentration Units (ug/L or mg/kg dry weight): MG/KG |CAS No. | Analyte | Concentration | C | |M | 2670| |7429-90-5 |Aluminum P |7440-36-0 |Antimony | 8.8|B| |P | |7440-38-2 |Arsenic_ 4.2 F |7440-39-3 |Barium 46.6 ΙP |7440-41-7 |Beryllium| 0.30|B| ΙP |7440-43-9 |Cadmium 1.0|B| l P |7440-70-2 |Calcium 4050| IP I |7440-47-3 |Chromium | 17.5 ΙP _2.2|0| |7440-48-4 |Cobalt ΙP |7440-50-8 |Copper 42.91 ΙP 7560| |7439-89-6 |Iron IP | |7439-92-1 |Lead 116| | IP I |7439-95-4 |Magnesium| 1930|] P 54.1|_| |7439-96-5 | Manganese | ΙP 0.54| |7439-97-6 |Mercury ICVI |7440-02-0 |Nickel 4.5|U||7440-09-7 |Potassium| 458 | B | IP | |7782-49-2 |Selenium 1.1 | U | | F |7440-22-4 |Silver 0.89|U ΙP |7440-23-5 |Sodium 36.0|B IP I |7440-28-0 |Thallium 1.1|U| | F | |7440-62-2 |Vanadium 13.7| ĮΡ |7440-66-6 |Zinc 109| I P |5955-70-0 |Cyanide 0.69|0| IASI RROWN Clarity Before: lor Refore. Taytura. MEDIUM

| COTOL D | erore. | BROWN | Claricy | perore. | | rexture. | MEDIO |
|-----------------|--------|---------|---------|---------|--------|------------|-------|
| Color A | fter: | PYELLOW | Clarity | After: | CLEAR_ | Artifacts: | |
| Comment S-10 | | | | | | | |
| | | | | | | | |
| | | | | | | | |

FORM I - IN

0000090

ATTAGEMENT AS

1 INORGANIC ANALYSES DATA SHEET

| EPA | SAMPL | E NO. |
|-----|-------|-------|
|-----|-------|-------|

| Lab Name: NYTE | EST_ENV_INC_ | | Contract: 93 | 3204 | 70 | S-22 _ | ΚΧΧ |
|------------------|--------------|------------|-----------------|------------|-----------------|------------------|-----------|
| Lab Code: NYTE | EST Ca | se No.: 18 | 547_ SAS No. | : | | SDG No. | : 450 |
| Matrix (soil/w | water): SOIL | | | Lab | Samp | ple ID: 854 | 1702 |
| Level (low/med | d): LOW_ | | | Dat | e Red | ceived: 10, | /14/93 |
| % Solids: | _85. | 7 | | | | | |
| Co | ncentration | Units (ug | /L or mg/kg dry | y we | ight) | : MG/KG | |
| | CDC No | | | | | | |
| | CAS No. | Analyte | Concentration | C | Q | M | |
| | 7429-90-5 | Aluminum | 3490 | i-i- | * | I P i | |
| | 7440-36-0 | | | | | -ii P-i | |
| 1 | 7440-38-2 | | 4.2 | | - | - F | |
| | 7440-39-3 | | 48.7 | | _* | - <u> -</u> | |
| | 7440-41-7 | | | | | - P- | |
| | 7440-43-9 | | 0.92 | | N* | - P | |
| | 7440-70-2 | | 7840 | | | - ' - ' P | |
| | 7440-47-3 | · — | 19.0 | | | - P | |
| | 7440-48-4 | | 3.3 | | | - P | |
| | 7440-50-8 | | 37.8 | | | - P | |
| | 17439-89-6 | | 9770 | | | - P | |
| | 7439-92-1 | · | 130 | | N | - P | |
| | 7439-95-4 | | | | _ _{TA} | _ F | |
| | 7439-96-5 | | | | * | - F | |
| | 17439-97-6 | | 0.55 | | | - CV | |
| | 7440-02-0 | | 7.0 | | | P | |
| | 7440-09-7 | | | | | - P | |
| | 7782-49-2 | - | 1.1 | · · — | W | _ F | |
| 1 | 7440-22-4 | | 1.2 | | _'' | - F P | |
| | 17440-23-5 | | 34.8 | | | - F _ P | |
| | 17440-28-0 | • | 1.1 | | | - F | |
| | 17440-62-2 | · | | ! ' | | | |
| | 17440-66-6 | | 138 | ! ! | | _ P_ P | |
| | 5955-70-0 | | 0.44 | · — · — | | | |
| | | | 0.44 | | | _ AS | |
| Color Before: | GRAY | Clarit | y Before: | | | Texture: | MEDIUM |
| Color After: | P. YELLOW | | y After: CLEA | | | Artifacts | |
| | | | oy incore one | | | ALCITACES | |
| Comments: S-2 | | | | | | w | ···· |
| | | | - | | | | |
| | | | | | | | <u>.</u> |

FORM I - IN

ILMO2.1

U.S. EPA - CLP

EPA SAMPLE NO. 1 INORGANIC ANALYSES DATA SHEET S-3XXX Lab Name: NYTEST_ENV_INC_____ Contract: 9320470___ Lab Code: NYTEST Case No.: 18547 SAS No.: SDG No.: 450 Lab Sample ID: 854703 Matrix (soil/water): SOIL Date Received: 10/14/93 Level (low/med): LOW % Solids: 76.4 Concentration Units (ug/L or mg/kg dry weight): MG/KG |CAS No. | Analyte |Concentration|C| IM I 2390| | |7429-90-5 |Aluminum | |7440-36-0 |Antimony | | P | |7440-38-2 |Arsenic_ F 81.1|_| |7440-39-3 |Barium IP | 0.25|U| |7440-41-7 |Beryllium| 1.0|0| $|P_{|}|$ |7440-43-9 | Cadmium | |7440-70-2 |Calcium 1630| | P | __140| ΙP |7440-47-3 |Chromium | |7440-48-4 |Cobalt |P | 3.6|B| |7440-50-8 |Copper 49.6 21700|<u>_</u>| |7439-89-6 |Iron | P 279|<u>|</u> 1090|B| |7439-92-1 |Lead ΙP |7439-95-4 |Magnesium| | P | 88.0| | IP I |7439-96-5 |Manganese| |7439-97-6 |Mercury | 0.78| ICVI 53.5| | |7440-02-0 |Nickel IP ! |7440-09-7 |Potassium| IP | 491 | U | |F | |7782-49-2 |Selenium | 1.2|0| |P | |7440-22-4 |Silver 1.0|U| __138|B| |7440-23-5 |Sodium P |7440-28-0 |Thallium | 1.2|0| l F |7440-62-2 | Vanadium | IP I 16.6| | |7440-66-6 |Zinc 132| | |5955-70-0 |Cyanide 0.62|0| | AS | Color Before: GRAY____ Clarity Before: ____ Texture: MEDIUM Color After: P. YELLOW Clarity After: CLEAR Artifacts: Comments:

FORM I - IN

ILMO2.1

U.S. EPA - CLP

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|---------------|-------------------------|--------------|---------------|--------|
| 7429-90-5 | Aluminum | 3110 | - | * | P |
| 7440-36-0 | Antimony | 570 | | * | P |
| 7440-38-2 | Arsenic | 8.4 | | * | F |
| 7440-39-3 | Barium | 88.8 | | * | P |
| 7440-41-7 | Beryllium | 0.31 | B | | P_ |
| 7440-43-9 | | 1.1 | U | N* | P |
| 7440-70-2 | Calcium | 8630 | | | P |
| 7440-47-3 | Chromium | 117 | | | P |
| 7440-48-4 | Cobalt - | 14.2 | B | | P |
| 7440-50-8 | Copper | 247 | | | P |
| 7439-89-6 | Iron | 94700 | - | | P |
| 7439-92-1 | Lead | 788 | | N | P |
| 7439-95-4 | Magnesium | 8610 | | | P |
| 7439-96-5 | Manganese | | - | * | P |
| 7439-97-6 | Mercury | 0.26 | ı — I | | CV |
| 7440-02-0 | Nickel | 173 | _ | | P |
| 7440-09-7 | Potassium | 550 | ו שו | | P i |
| 7782-49-2 | Selenium | | | S | F |
| 7440-22-4 | Silver | 1.1 | U | | P |
| 7440-23-5 | Sodium | 836 | В | | IP I |
| 7440-28-0 | Thallium | 1.4 | | | F |
| 7440-62-2 | _ | 30.3 | | | P |
| 7440-66-6 | Zinc | 7300 | _ | | i P |
| 5955-70-0 | Cyanide | 0.65 | ์ซิเ | | AS |
| | i | <u> </u> | İ | | į į |
| | · | · | | | · — · |

| Color | Before: | GRAY | Clarity | Before: | | Texture: | MEDIUM |
|---------------|---------|------------------|---------|---------|----------------|------------|---------------------------------------|
| Color | After: | COLORLESS | Clarity | After: | CLEAR_ | Artifacts: | · · · · · · · · · · · · · · · · · · · |
| Commer S-4 | | C_A_4X_DILUTION_ | | | a and a second | | |
| | | | | | | | |

FORM I - IN

ILMO2.1

| | | U.S. | EPA - CLP | | | | | |
|----------------|----------------|---------------|----------------------|------------------|------------------|----------------|---------|--------|
| | | INORGANIC A | 1 ANALYSES DATA S | SHE | ET | EP# | A SAMPL | E NO. |
| Lab Name: NYTE | ST_ENV_INC_ | | Contract: 93 | 320 | 470 | - | s-5xx | x |
| Lab Code: NYTE | IST Ca | se No.: 18 | 547_ SAS No. | : _ | | SDO | No.: | 450 |
| Matrix (soil/w | vater): SOIL | _ | | Lal | b Samp | le II | 8547 | 05 |
| Level (low/med | d): LOW_ | | | Da | te Rec | eivec | i: 10/1 | 4/93 |
| % Solids: | _62. | 6 | | | | | | |
| Co | oncentration | Units (ug | /L or mg/kg dry | y w | eight) | : MG/ | ′KG | |
| | CAS No. | Analyte | Concentration | C | Q | M | | |
|) | 7429-90-5 | Aluminum | l <u> </u> | | * | <u> </u> | | |
| | 7440-36-0 | | · | · · - | — _* — | iP i | | |
| ı | 17440-38-2 | | 8.1 | | — _* — | - - F | | |
| • | 17440-39-3 | | 336 | - | * | P i | | |
| | 17440-41-7 | | | | | P | | |
| | 7440-43-9 | | 4.6 | | N* | ip i | | |
| | 7440-70-2 | · | 6860 | | | P | | |
| | 7440-47-3 | | 52.3 | | | IP I | | |
| | 17440-48-4 | Cobalt | 12.0 | | | P | | |
| , | 7440-50-8 | Copper | 823 | ĺ | | P I | | |
| 1 | 7439-89-6 | | 39300 | $_{I}^{I}$ | | P | | |
| | 7439-92-1 | Lead | 500 | ı ⁻ ı | N | P | | |
| | 7439-95-4 | Magnesium | 5680 | $I^{-}I^{-}$ | | P | | |
| | 7439-96-5 | Manganese | 305 | I_I | * | P_ | | |
| | 7439-97-6 | Mercury | 1.0 | | | CVI | | |
| | 17440-02-0 | Nickel | 35.7 | | | P_ | | - |
| | 17440-09-7 | · | | | | _ P_ | | |
| | 17782-49-2 | | 1.6 | | | F_ | | |
| | 17440-22-4 | · | 1.2 | | | _ P_ | | |
| | 17440-23-5 | | 188 | | | P_ | | |
| <u> </u> | 7440-28-0 | · — | 1.6 | | | F_ | | |
| | 17440-62-2 | · — | 37.9 | | | P_ | | |
| | 7440-66-6 | | 1990 | | | P_ | | |
| <u> </u> | 5955-70-0 | Cyanide | l0.68 | ַןטן ווו | | _ AS _ | | |
| Color Before: | BROWN | Clari | ty Before: | | | Text | cure: | MEDIUM |
| Color After: | PYELLOW | Clari | ty After: CLE | AR_ | | Art | ifacts: | |
| · | | | | | | | | |

Comments: S-5

FORM I - IN

ILMO2.1

1 INORGANIC ANALYSES DATA SHEET

| EPA | SAMPLE | NΩ |
|-----|--------|-----|
| EEA | | INO |

| | | INORGANIC A | ANALYSES DATA : | OUPPI | |
|-----------------------|---------------|-------------|-----------------|------------------|-----------------|
| | | | | | s-6xxx |
| Lab Name: NYTE | ST_ENV_INC_ | | Contract: 93 | 320470 | |
| Lab Code: NYTE | ST Ca | se No.: 185 | SAS No. | <u> </u> | SDG No.: 450 |
| Matrix (soil/w | ater): SOIL | _ | | Lab Samp | le ID: 854706 |
| Level (low/med | low_ | _ | | Date Rec | eived: 10/14/93 |
| % Solids: | _65. | 9 | | | |
| Со | ncentration | Units (ug, | /L or mg/kg dry | y weight) | : MG/KG |
| | [| 1 | <u> </u> | | |
| | CAS No. | Analyte | Concentration | ici Q I I | M |
| | 7429-90-5 | | 2890 | | [<u>P_</u> |
| | 17440-36-0 | | | | P_ |
| | 17440-38-2 | | 13.5 | | F_ |
| | 17440-39-3 | | 298 | | P_ |
| | 7440-41-7 | | | · · · — — — — | [P_] |
| | 7440-43-9 | · — | 42.0 | | P_ |
| | 17440-70-2 | · | 5440 | · — · — — — — | P_ |
| | 17440-47-3 | · | 64.0 | | P_ |
| | 17440-48-4 | | 25.0 | | P_ |
| | 7440-50-8 | | 323 | | P_ |
| | 7439-89-6 | • | 123000 | · | P_ |
| | 7439-92-1 | | 3810 | | P_ |
| | 7439-95-4 | | | · _ · | P_ |
| | 7439-96-5 | _ | | | P_ |
| | 7439-97-6 | · | 1.7 | | [CV] |
| | 7440-02-0 | · | 97.2 | · · | P_ |
| | 7440-09-7 | • | · | | P_ |
| | 7782-49-2 | · — | · | · · · — — — | F_ |
| | 7440-22-4 | | 1.4 | | [P_] |
| | 7440-23-5 | | 91.6 | • | P_ |
| | 7440-28-0 | · | 1.4 | | [F_ |
| | 7440-62-2 | | | !-! | P_ |
| | 7440-66-6 | | 2510 | | P |
| | 5955-70-0 | Cyanide | 0.83 | | AS |
| Color Before: | GRAY | Clarit | ty Before: | | Texture: MEDIUM |
| Color After: | PYELLOW | Clarit | ty After: CLE | AR_ | Artifacts: |
| Comments: S-6IRON_ | AT_A_4X_DIL | UTION | | | |

FORM I - IN

ILMO2.1

U.S. EPA - CLP

EPA SAMPLE NO. INORGANIC ANALYSES DATA SHEET s-7xxx Lab Name: NYTEST_ENV_INC_____ Contract: 9320470____| Lab Code: NYTEST Case No.: 18547 SAS No.: ____ SDG No.: 450_ Matrix (soil/water): SOIL Lab Sample ID: 854707 Level (low/med): LOW Date Received: 10/14/93 Solids: _48.8 Concentration Units (ug/L or mg/kg dry weight): MG/KG | CAS No. | Analyte | Concentration | C | M I |7429-90-5 |Aluminum | 1370| IP I ____130|⁻⁻| |7440-36-0 |Antimony | IP | 2.6|B| |7440-38-2 |Arsenic | F 34.5|B| |7440-39-3 |Barium_ ΙP |7440-41-7 |Beryllium| __0.36|U| ___4.0|_| l P |7440-43-9 | Cadmium | |7440-70-2 |Calcium 15500| IP | __17.8| |7440-47-3 |Chromium | ΙP ____3.6|ប៊ី| l P |7440-48-4 |Cobalt 39.4| | |7440-50-8 |Copper l P 7470| | |7439-89-6 |Iron __115|_| __423|B| |7439-92-1 |Lead |P |7439-95-4 |Magnesium| | P 61.6| | |7439-96-5 |Manganese| ΙP |7439-97-6 |Mercury 0.39| ICVI |7440-02-0 |Nickel 12.0|B| IP I |7440-09-7 |Potassium| 694|U| ΙP 2.0|0| |7782-49-2 |Selenium | F |7440-22-4 |Silver 1.4|0| IP | |7440-23-5 |Sodium 118|B| IP I |7440-28-0 |Thallium | 2.0|0| F |7440-62-2 | Vanadium | 10.8|B| ΙP |7440-66-6 |Zinc 414| | |5955-70-0 |Cyanide 0.91|U| IASI Clarity Before: Color Before: GRAY Texture: MEDIUM Color After: COLORLESS Clarity After: CLEAR_ Artifacts: ____ Comments: S-7

FORM I - IN

ILMO2.1

EPA SAMPLE NO. INORGANIC ANALYSES DATA SHEET S-8XXX Lab Name: NYTEST ENV_INC_____ Contract: 9320470 Lab Code: NYTEST Case No.: 18547_ SAS No.: SDG No.: 450 Matrix (soil/water): SOIL Lab Sample ID: 854708 Level (low/med): LOW Date Received: 10/14/93 % Solids: 67.5 Concentration Units (ug/L or mg/kg dry weight): MG/KG | Analyte |Concentration|C| CAS No. |7429-90-5 |Aluminum 71401 I P 465| | |7440-36-0 |Antimony | IP_ |7440-38-2 |Arsenic 21.0| ŀF |7440-39-3 |Barium 483| | I P |7440-41-7 |Beryllium| 0.91|B| l P |7440-43-9 |Cadmium 17.0| | I P |7440-70-2 |Calcium 11300| ΙP |7440-47-3 |Chromium 91.3| IP I |7440-48-4 |Cobalt 17.8| | IP I |7440-50-8 |Copper 247| ΙP |7439-89-6 |Iron 57600| P |7439-92-1 |Lead 1410 P |7439-95-4 |Magnesium| 6470| | ΙP |7439-96-5 |Manganese| 623 | | I P _3.21_I |7439-97-6 |Mercury ICVI |7440-02-0 |Nickel 90.01 IP I |7440-09-7 |Potassium| 584 | B | IP I |7782-49-2 |Selenium | |F | 1.3|0| |7440-22-4 |Silver 1.9|B| ΙP __238|B| lΡ |7440-23-5 |Sodium |7440-28-0 |Thallium 1.3|U| IF I |7440-62-2 | Vanadium | 85.5| ΙP |7440-66-6 |Zinc 1180| IP | |5955-70-0 |Cyanide 0.61 | U | ASI Color Before: BLACK Clarity Before: Texture: MEDIUM Color After: P. YELLOW Clarity After: CLEAR Artifacts: Comments:

FORM I - IN

IRON AT A 2X DILUTION. ARSENIC AT A 2X DILUTION

ILMO2.1

1
INORGANIC ANALYSES DATA SHEET

| EPA | SAMPLE | NO. |
|-----|--------|-----|
|-----|--------|-----|

| TIG AT A DY | DILUTION. | | | | | | | |
|-------------|---------------|---------------|--------------------|---------|---------------|-----------------|---------|-------|
| S-9ARSEN | IC_AT_A_5X_D | LUTION | | | | | | ···· |
| lor After: | BROWN | Clarit | y After: CLEA | R_ | | Art | ifacts: | |
| lor Before: | BLACK | Clarit | y Before: | | | Тех | ture: | MEDIU |
| | <u> </u> | | | _i_ | | ii | | |
| | 5955-70-0 | Cyanide | 0.48 | וֹט | | IAS | | |
| | 7440-66-6 | | 258 | _!_ | | P I | | |
| | 17440-62-2 | | 18.2 | ٦ | | IP I | | |
| | 17440-28-0 | | 1.2 | ן ט | W | F | | |
| | 17440-23-5 | | 175 | | | P i | | |
| | 7440-22-4 | | 0.99 | | | P | | |
| | 17782-49-2 | | 1.2 | | | F | | |
| | 7440-09-7 | | 480 | | | - P | | |
| | 17440-02-0 | Nickel | 17.8 | | | P | | |
| | 17439-97-6 | Mercury | 32.1 | | | icvi | | |
| | 17439-96-5 | Manganese | | | * | P | | |
| | 7439-95-4 | | 467 | | | -¦*¦ | | |
| | 7439-92-1 | | 285 | | N | -¦¦ | | |
| | 7439-89-6 | | 46000 | | | - F _ P | | |
| | 17440-50-8 | | 109 | | | _ P_ P | | |
| | 17440-48-4 | | 8.8 | | - | - P- | | |
| | 17440-47-3 | | 2640 36.1 | | | - P_ | | |
| | 17440-70-2 | | 1.4 2640 | | _N*_ | -! <u>P</u> -! | | |
| | 17440-43-9 | | | | NT+ | - P_ | | |
| | 17440-39-3 | | 136 | | _* | - <u>P</u> _ | | |
| | 17440-38-2 | | 41.3 | | - <u>*</u> | _ <u>F</u> _ | | |
| | 17440-38-2 | | | | <u>*</u> | _ P | | |
| | 17440-36-0 | | 2120 | · — · — | * | _ P_ | | |
| | | 1 | | i_i_ | Q | M _ | | |
| | CAS No. | Analyte | Concentration | | | | | |
| C | Concentration | Units (ug | /L or mg/kg dr | y we | eight |): MG | G/KG | |
| Solids: | _78. | 9 | | | | | | |
| vel (low/me | ed): LOW_ | _ | | Dat | e Re | ceive | ed: 10/ | 14/93 |
| trix (soil, | /water): SOII | <u>_</u> | | Lab | Sam | ple I | D: 854 | 709 |
| b Code: NY | TEST Ca | se No.: 18 | 547_ SAS No. | : _ | | SI | OG No.: | 450_ |
| b Name: NY | rest_env_inc_ | | Contract: 9 | 3204 | 170 | _ | S-9X | XX |
| | | | | | | | g ^** | V23.2 |
| | | | | | | | | |

FORM I - IN

ILMO2.1

nytest environmental nc

REPORT OF ANALYSIS

Log in No.:18547

10.0

We find as follows:

METHOD DETECTION LIMIT

Results in mg/kg (dry wt. basis):

| Sample Identification | | Parameter(s) |
|-----------------------|------|------------------------------------|
| | | Total Petroleum Hydrocarbons |
| | | |
| 1854701 | s-1 | 729 |
| | S-2 | 508 |
| | S-3 | 9460 |
| | S-4 | 357 |
| | S-5 | 235000 🎘 |
| | S-6 | 1320 |
| | S-7 | 1270 |
| | S-8 | 481 |
| | s-9 | 502 |
| | s-10 | 655 |
| METHOD BI | ANK | <10.0 |

ATTACHMENT V



1 WESTON WAY WEST CHESTER, PA 19380-1449 PHONE: 215-692-3030 FAX: 215-430-3124

ORGANIC QUALITY ASSURANCE REVIEW NJDEPE SITE: VANGUARD VINYL CASE NO.: 18547

REVIEW PERFORMED BY THE ANALYTICS DIVISION OF ROY F. WESTON, INC.

PREPARED BY: The left for

Kelly Muir Spittler

Unit Leader - Data Validation

02-14-94

Date

VERIFIED BY:

Zohrelf Hamid, Ph.D.

Section Manager - Data Validation

ATTAN SOOFIT



NJDEPE SITE: VANGUARD VINYL CASE NO.: 18547

CASE SUMMARY

This data validation review consists of the Vanguard Vinyl data package for the 10-13-93 sampling event. Laboratory analyses were performed by NYTEST Environmental, Inc. for TCL Volatile, Semivolatile, and Pesticide/PCB Organics Target Compounds.

All data have been validated with regard to usability according to the quality assurance guidelines set forth by DPFSR Standard Operating Procedure (SOP No.: 5A.13, Revision No.:0). If you have any questions or comments on this data review, please contact Kelly Spittler at (215) 344-3746.

The following samples are contained within this report:

| FIELD SAMPLE (SA0930) | LAB ID | <u>MATRIX</u> | <u>VTSR</u> |
|--------------------------|--------|---------------|-------------|
| 3084 | FB-SS | Aqueous | 10-14-93 |
| 3083 | FB-T | Aqueous | 10-14-93 |
| 3073 | S-1 | Soil | 10-14-93 |
| 3074 | S-2 | Soil | 10-14-93 |
| 3075 | S-3 | Soil | 10-14-93 |
| 3076 | S-4 | Soil | 10-14-93 |
| 3077 | S-5 | Soil | 10-14-93 |
| 3078 | S-6 | Soil | 10-14-93 |
| 3079 | S-7 | Soil | 10-14-93 |
| 3080 | S-8 | Soil | 10-14-93 |
| 3081 | S-9 | Soil | 10-14-93 |
| 3082 | S-10 | Soil | 10-14-93 |



OUALITY ASSURANCE REVIEW

The findings offered in this report are based upon a rigorous review of the following criteria, and all deficiencies are summarized under each fraction:

- Data Completeness
- Holding Times
- GC/MS Instrument Performance Check
 - Calibration
 - Blanks
 - Systems Monitoring Compounds/Surrogate Recoveries
 - Matrix Spike/Spike Duplicate
 - Internal Standard
- * Instrument Performance
- Compound Identification
 - Compound Quantitations
- * All criteria were met for this classification.

VOLATILE ORGANICS

The positive result for acetone should be removed from the Form I for sample FB-T, since no spectra was provided and this compound result was crossed out on the quantitation report. The laboratory has been contacted for resubmission.

The following system monitoring compound recoveries were outside the QC limits.

| <u>SAMPLE</u> | SURROGATE | RECOVERY |
|---------------|------------------------|-----------------|
| S-5 | 4-Bromofluorobenzene | 196 |
| S-5MS | 4-Bromofluorobenzene | 123 |
| S-9 | Toluene-d ₈ | 152 |
| | 4-Bromofluorobenzene | 45 |
| S-9RE | Toluene-d ₈ | 152 |

These samples are exhibiting matrix effects. Samples S-5 and S-9RE are to used as the representative results; however, due to the SMC outliers, all positive results and non-detects are qualified estimated.



Page 3

The MS/MSD recoveries for toluene (58/37%) and RPD results for toluene (44) and chlorobenzene (29) were outside the QC limits in the analyses of S-5MS/MSD. Toluene was detected in the unspiked sample; however, no action is required based on MS/MSD outliers.

The following internal standard areas were below the control limits:

| <u>SAMPLE</u> | <u>INTERNAL STANDARD</u> |
|---------------|------------------------------|
| S-9 | All Standards |
| S-9RE | Chlorobenzene-d ₅ |

This sample is exhibiting a matrix effect. The reanalysis is reported; however all sample data quantified in reference to chlorobenzene are quantified estimated.

The field and method blanks contained common contaminants methylene chloride and acetone. All positive results less than 3X the blank levels are considered to be artifacts of laboratory contamination and are negated. Results greater than 3X the blank level are believed to be real, but are quantitatively qualified due to blank contamination. (Field blank contamination is qualified or negated due to associated method blank contamination.)

| BLANK | COMPOUND | CONCENTRATION |
|--------------|-------------------------------|----------------------|
| VBLK09 | Methylene Chloride | 3 ug/L |
| VBLKD21 | Methylene Chloride Acetone | 7 ug/kg 8 ug/kg |
| VBLKD22 | Acetone | 3 ug/kg |

SEMIVOLATILE ORGANICS

The Form VII (page 106) needs to be resubmitted, since the reported results do not agree with the raw data, all affected sample results should also be resubmitted. The laboratory has been contacted for clarification.



Page 4

The method blanks contained common contaminant bis(2-ethylhexyl)phthalate, along with up to two (2) tentatively identified compounds. All positive results less than 3X the blank levels are considered to be artifacts of laboratory contamination and are negated. Results greater than 3X the blank level are considered real, but are quantitatively qualified due to method blank contamination.

| BLANK | COMPOUND | CONCENTRATION |
|--------------|----------------------------|----------------------|
| SBLK66 | Bis(2-ethylhexyl)phthalate | 58 ug/kg |
| SBLK43 | Bis(2-ethylhexyl)phthalate | 110 ug/kg |

Sample S-3 and S-6 were reanalyzed 6 days outside of the required holding time. These reanalyses are reported as the representative results but are qualified estimated due to the exceeded holding time.

The following samples did not meet EPA surrogate recovery criteria:

| SAMPLE | SURROGATE | RECOVERY |
|---------------|--|-----------------------|
| S-3 | 2-Fluorobiphenyl Teryphenyl-d ₁₄ | 124 197 |
| S-6 | Nitrobenzene-d₅ 2-Fluorobiphenyl Phenol-d₅ 2-Fluorophenol 2,4,6-Tribromophenol | 6 8 7 6 6 |
| S-9 | 2-Fluorobiphenyl Teryphenyl-d ₁₄ | 119 340 |
| S-5MSD | 2-Fluorobiphenyl Teryphenyl-d ₁₄ | 116 204 |

None of these samples are exhibiting matrix effects. Samples S-3 and S-6 were reanalyzed and the surrogate recovery criteria were met; therefore, the reanalyses are reported. Sample S-9 was not reanalyzed; therefore, the base neutral fraction for sample S-9 is rejected. Sample S-5MSD was reanalyzed as the MS, without outliers.





The following internal standard areas were below the control limits:

| SAMPLE | INTERNAL STANDARD |
|--------|--|
| S-3 | Phenanthrene-d ₁₀ Chrysene-d ₁₂ |
| S-5 | Chrysene-d ₁₂ |
| S-5RE | Chrysene-d ₁₂ |
| S-5MS | Chrysene-d ₁₂ |
| S-5MSD | Chrysene-d ₁₂ |
| S-6 | Chrysene-d ₁₂ |
| S-8 | Chrysene-d ₁₂ |
| S-8RE | Chrysene-d ₁₂ |

All samples were reanalyzed and samples S-5 and S-8 were exhibiting matrix effects. The original analyses are reported for these samples, but all data quantified in reference to the outliers are qualified estimated. Samples S-3 and S-6 were reanalyzed without IS outliers; therefore, the reanalyses are reported as the representative results.

The following MS/MSD recoveries were outside the QC limits in the analyses of samples S-5MS/MSD:

| COMPOUND | RECOVERY |
|------------------------|-----------------|
| Phenol | 126/116 |
| 1,2,4-Trichlorobenzene | 32 |
| Acenaphthene | 23 |
| 4-Nitrophenol | 128 |
| 2,4-Dinitrotoluene | 94/115 |

These compounds were not detected in the unspiked sample; however, since no action is required based on MS/MSD outliers, no qualification has been applied on this basis.



PESTICIDE/PCBs

Many PEMS compounds in the initial calibration sequence displayed peaks of less than 10% for aldrin, endrin ketone, 4,4-DDE, delta-BHC, and endrin aldehyde. No action has been specified due to these outliers; therefore, no qualification has been applied.

| SAMPLE | SURROGATE | <u>COLUMN</u> | % RECOVERY |
|---------------|------------------|------------------------------|------------------|
| S-6 | TCMX | DB608 | 58 |
| S-10 | DCB | DB608/DB1701 | 162/156 |
| S-2 | TCMX | DB608 | 58 |
| S-3 | TCMX | DB608/DB1701 | 59/59 |
| S-4 | TCMX DCB | DB608/DB1701 DB608/DB1701 | 39/34 278/218 |
| S-5 | TCMX | DB608/DB1701 | 170/169 |
| S-5MS | DCB | DB608 | 155 |
| S-5MSD | DCB | DB608 | 182 |
| S-7 | TCMX DCB | DB608 DB608/DB1701 | 158 214/166 |
| S-8 | TCMX DCB | DB608/DB1701 DB608/DB1701 | 46/55 49/50 |
| S-9 | DCB | DB608 | 160 |

| DCB | = | Decachlorobiphenyl |
|------|---|----------------------|
| TCMX | = | Tetrachloro-m-xylene |

Sample results may be biased for these analyses; however, no specific qualification is required based on surrogate recovery outliers.

Several positive results had %D between column values exceed 25%; therefore, these results are quantitatively qualified on the target summaries.

The laboratory failed to provide an undiluted analysis run or an analysis at a level less than 10 times the original analysis for the samples. Since an additional run was not provided and a screening procedure was not performed, all positive results are accepted and non-detects are rejected, as per NJDEPE specifications.

The following MS/MSD recoveries and RPD results were outside the QC limits in the analyses of S-5MS/MSD:

| MS/MSD/RPD | COMPOUND | <u>RESULT</u> |
|------------|-----------------|---------------|
| MS/RPD | Lindane | 38/79 |
| MSD/RPD | Heptachlor | 153/64 |
| MSD/RPD | Aldrin | 194/119 |
| RPD | Dieldrin | 44 |
| MS/RPD | 4,4-DDT | -8/248 |

Most of these compounds were not detected in the unspiked sample and since no action is required based on MS/MSD outliers, no qualification has been applied to the sample results on this basis.



ATTACHMENTS

1. Attachment I - Glossary of Data Qualifier Codes

2. Attachment II - Target and Non-target Analyte Summary

3. Attachment III - NJDEP Data Validation Forms



ATTACHMENT I GLOSSARY OF DATA QUALIFIER CODES



GLOSSARY OF DATA QUALIFIERS

CODES RELATING TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

- U = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS.
- R = UNRELIABLE RESULT. ANALYTE MAY OR MAY NOT BE PRESENT IN THE SAMPLE. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.
- N = NEGATED COMPOUND WAS CONSIDERED AS NOT PRESENT IN THE SAMPLE.

(NO CODE) = CONFIRMED IDENTIFICATION

CODES RELATING TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

- J = ANALYTE PRESENT. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.
- UJ = THE REPORTED QUANTITATION LIMITS ARE QUALIFIED ESTIMATED.

OTHER CODES

Q = NO ANALYTICAL RESULT.



ATTACHMENT II TARGET AND NON-TARGET ANALYTE SUMMARY



FOOTNOTES FOR TARGET AND NON-TARGET ANALYTE SUMMARY

- 1. The reported concentration is quantitatively qualified because the concentration is below the CRQL.
- 2. The value reported is less than or equal to 3X the value in the method blank. It is the policy of NJDEPE-DPFSR to negate the reported value due to probable foreign contamination unrelated to the actual sample. The end-user, however, is alerted that a reportable quantity of the compound was detected.
- 3. The value reported is greater than three (3) times the value in the method blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to the method blank contamination. The "B" qualifier alerts the end-user to the presence of this compound in the method blank.
- 4. The reported concentration is quantitatively qualified due to surrogate recovery outliers.
- 5. One internal standard area in the sample did not meet the QC criteria. Therefore, all compound results using the internal standard for quantitation are quantitatively estimated.
- 6. The reported result is quantitatively qualified because the %D between column values exceeded 25%.
- 7. The sample holding time to reextraction was exceeded. All positive results including the tentatively identified compounds are qualified.

CASE NO: <u>18547</u>

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

AB NAME: <u>NYTEST</u>

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|-------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
| VOA/1.0 | S-1 | METHYLENE CHLORIDE | 7J | 6BJ | 6NB | NEGATED | 1,2 |
| | SA10133073 | ACETONE | 83 | 12B | 12NB | NEGATED | 2 |
| | | 2 TICS | | | | | |
| | | | | | | | |
| BNA/1.0 | S-1 | DIMETHYLPHTHALATE | 330U | 190J | 190J | QUALIFIED | 1 |
| | SA10133073 | DIETHYLPHTHALATE | 330U | 120J | 120J | QUALIFIED | 1 |
| | | PHENANTHRENE | 330U | 490J | 490J | QUALIFIED | 1 |
| | | DI-N-BUTYLPHTHALATE | 330U | 150J | 150J | QUALIFIED | 1 |
| | | FLUORANTHENE | 330U | 69OJ | 690J | QUALIFIED | 1 |
| | | PYRENE | 330U | 700J | 700J | QUALIFIED | 1 |
| | | BENZO(a)ANTHRACENE | 330U | 290J | 290J | QUALIFIED | 1 |
| | | CHRYSENE | 330U | 360J | 360J | QUALIFIED | 1 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 110J | 8000BD* | 8000JB | QUALIFIED | 3 |
| | | BENZO(b)FLUORANTHENE | 330U | 280J | 280J | QUALIFIED | 1 |
| | | BENZO(k)FLUORANTHENE | 330U | 190J | 190J | QUALIFIED | 1 |
| | | BENZO(a)PYRENE | 330U | 200J | 200J | QUALIFIED | 1 |
| | | 21 TICS | | | | | |
| | | UNKNOWN RT=6.85 | 8400J | 14000ABJ | 14000NB | NEGATED | 2 |
| | | | | | | | |
| PEST/2.0+ | S-1 | 4,4-DDE | 3.3U | 8.9 | 8.9 | | |
| | SA10133073 | 4,4-DDD | 3.3U | 12P | 12J | QUALIFIED | 6 |
| | | ENDRIN ALDEHYDE | 3.3U | 28P | 28J | QUALIFIED | 6 |
| | | AROCLOR-1260 | 33U | 170 | 170 | | |
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REPORTED FROM THE 4-FOLD DILUTION. THE NON-DETECTS ARE REJECTED DUE TO LACK OF UNDILUTED ANALYSIS.

ATTACKTER L'B

CASE NO: <u>18547</u>

AB NAME: <u>NYTEST</u>

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0 | S-2 | METHYENE CHLORIDE | 7 J | 6BJ | 6NB | NEGATED | 1,2 |
| | SA10133074 | ACETONE | 83 | 20B | 20NB | NEGATED | 2 |
| | | 2 TICS | | | | | |
| | | | | | | | |
| BNA/1.0 | S-2 | NAPHTHALENE | 330U | 46 J | 46J | QUALIFIED | 1 |
| | SA10133074 | DIMETHYLPHTHALATE | 330U | 310J | 310J | QUALIFIED | 1 |
| | | ACENAPHTHYLENE | 330U | 47J | 47J | QUALIFIED | 1 |
| | | 2,6-DINITROTOLUENE | 330U | 190J | 190Ј | QUALIFIED | 1 |
| | | ACENAPHTHENE | 330U | 41J | 41J | QUALIFIED | 1 |
| | | DIETHYLPHTHALATE | 330U | 140J | 140J | QUALIFIED | 1 |
| | | FLUORENE | 330U | 56.3 | 56J | QUALIFIED | 1 |
| | | PHENANTHRENE | 330U | 510 | 510 | | |
| 1 | | ANTHRACENE | 330U | 963 | 96J | QUALIFIED | 1 |
| | | DI-N-BUTYLPHTHALATE | 330U | 170J | 170J | QUALIFIED | 1 |
| | | FLUORANTHENE | 330U | 730 | 730 | | |
| *** | | PYRENE | 330U | 740 | 740 | | |
| | | BENZO(a)ANTHRACENE | 330U | 360J | 360J | QUALIFIED | 1 |
| | | CHRYSENE | 330U | 490 | 490 | | |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 110J | 640B | 640ЛВ | QUALIFIED | 3 |
| | | BENZO(b)FLUORANTHENE | 330U | 350J | 350J | QUALIFIED | 1 |
| | | BENZO(k)FLUORANTHENE | 330U | 270J | 270J | QUALIFIED | 1 |
| ····· | | BENZO(a)PYRENE | 330U | 320J | 320J | QUALIFIED | 1 |
| | | INDENO(1,2,3-cd)PYRENE | 330U | 200J | 200J | QUALIFIED | 1 |
| | | 21 TICS | | | | | |
| | | UNKNOWN RT=6.83 | 8400J | 490JAB | 490NB | NEGATED | 2 |
| | | | | | | | |
| PEST/4.0+ | S-2 | 4,4-DDD | 3.3U | 18P | 18J | QUALIFIED | 6 |
| | SA10133074 | ENDRIN ALDEHYDE | 3.3U | 24P | 24J | QUALIFIED | 6 |
| | | AROCLOR-1260 | 33U | 460 | 460 | | |
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THE NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

| CASE NO: | 18547 | |
|----------|--------|--|
| | | |
| R NAME | NYTEST | |

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0 | S-3 | METHYLENE CHLORIDE | 7 J | 5BJ | 5NB | NEGATED | 1,2 |
| | SA10133075 | 1,2-DICHLOROETHENE (TOTAL) | 10U | 47 | 47 | | |
| | | TRICHLOROETHENE | 10U | 140 | 140 | | |
| | | TETRACHLOROETHENE | 10U | 220 | 220 | | |
| | | TOLUENE | 10U | 21 | 2J | QUALIFIED | 1 |
| | | 4 TICS | | | | | |
| | | | | | | | |
| BNA/4.0* | S-3 | PHENOL | 330U | 310J | 310J | QUALIFIED | 1,7 |
| | SA10133075 | NAPHTHALENE | 330U | 1200J | 1200J | QUALIFIED | 1,7 |
| | | 2-METHYLNAPHTHALENE | 330U | 2200 | 2200 | | |
| | | DIMETHYPHTHALATE | 330U | 45QJ | 400J | QUALIFIED | 1,7 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 58J | 760ЛВ | 760JB | QUALIFIED | 1,3,7 |
| | | 21 TICS | | | | | |
| | | UNKNOWN RT=6.70 | 3300J | 13000JAB | 13000NB | NEGATED | 2,7 |
| | | | | | | | |
| PEST/6.0+ | S-3 | AROCLOR-1260 | 33U | 240J | 240J | QUALIFIED | 1 |
| | SA10133075 | | | | | | |
| | | | | | | | |

THE ANALYSIS IS QUALIFIED ESTIMATED DUE TO EXCEEDED HOLDING TIMES. THE NON-DETECTS ARE REJECTED DUE TO LACK OF UNDILLUTED ANALYSIS.

ATTACHERT LES

CASE NO: 18547

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

B NAME: NYTEST

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|-------------------|------------|----------------------------|--------------------------|---------------------------------------|-----------------------|-----------------|--------------|
| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
| VOA/1.0 | S-4 | METHYLENE CHLORIDE | 7J | 10BJ | 10NB | NEGATED | 1,2 |
| | SA10133076 | ACETONE | ន្ស | 8BJ | 8NB | NEGATED | 1,2 |
| | | TOLUENE | 10U | 23 | 21 | QUALIFIED | 1 |
| | | 2 TICS | | | | | |
| , | | | | | | | |
| BNA/2.0 | S-4 | DIMETHYLPHTHALATE | 330U | 3600 | 3600 | | |
| | SA10133076 | DIETHYLPHTHALATE | 330U | 84QJ | 840J | QUALIFIED | 1 |
| | | DI-N-BUTYLPHTHALATE | 330U | 210J | 210J | QUALIFIED | 1 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 110J | 510BJ | 510NB | NEGATED | 1,2 |
| | | 21 TICS | | | | | - |
| | | UNKNOWN RT=6.82 | 8400J | 6000JAB | 6000NB | NEGATED | 2 |
| | | | | | | | |
| | | | | | | | |
| PEST/6.0+ | S-4 | DIELDRIN | 3.3U | 31P | 31J | NEGATED | 6 |
| | SA10133076 | 4,4-DDE | 3.3U | 19J | 19J | QUALIFIED | 1 |
| | | 4,4-DDT | 3.3U | <i>7</i> 8P | <i>7</i> 8J | QUALIFIED | 6 |
| | | ENDRIN ALDEHYDE | 3.3U | 35P | 35J | QUALIFIED | 6 |
| | | AROCLOR-1260 | 33U | 270J | 270J | QUALIFIED | 1 |
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THE NON-DETECTS ARE REJECTED DUE TO A LACK OF UNDILUTED ANALYSIS.

CASE NO: 18547

AB NAME: NYTEST

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | POOT NOTE |
|----------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0* | S-5 | METHYLENE CHLORIDE | 7J | 30B | 30JB | QUALIFIED | 4,3 |
| | SA10133077 | ACETONE | 8J | 39B | 39B | QUALIFIED | 4,3 |
| | | 1,2-DICHLOROETHENE (TOTAL) | 10U | 4J | 4 J | QUALIFIED | 1,4 |
| | | TRICHLOROETHENE | 10U | 19 | 19J | QUALIFIED | 4 |
| | | TOLUENE | 10U | 66 | 66J | QUALIFIED | 4 |
| | | 10 TICS | | | | | |
| | | | | | | | |
| BNA/10.0+ | S-5 | 2,6-DINTTROTOLUENE | 330U | 11003 | 1100J | QUALIFIED | 1 |
| | SA10133077 | PHENANTHRENE | 330U | 530J | 530J | QUALIFIED | 1 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 110J | 2400BJ | 2400NB | NEGATED | 1,2,5 |
| | | 19 TICS | | | | | |
| | | UNKNOWN RT=6.81 | 8400J | 10000JAB | 10000NB | NEGATED | 2 |
| | | | | | | | |
| PEST/10.0** | S-5 | ALPHA-BHC | 1.7U | 50P | 50J | QUALIFIED | 6 |
| | SA10133077 | вета-внс | 1.7U | 25ЛР | 25 J | QUALIFIED | 1,6 |
| | | DELTA-BHC | 1.7U | 18ЛР | 18J | QUALIFIED | 1,6 |
| | | 4,4-DDT | 3.3U | 60 | 60 | | |
| | | ENDRIN ALDEHYDE | 3.3U | 77 | 77 | | |
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ALL DATA IS QUALIFIED ESTIMATED DUE TO SMC OUTLIERS.
ALL SAMPLE DATA QUANTIFIED IN REFERENCE TO INTERNAL STANDARD CHRYSENE ARE QUALIFIED ESTIMATED.
THE NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

| CASE NO: | 18547 |
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| AR NAME | NYTEST |

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0 | S-6 | METHYLENE CHLORIDE | 10U | ស | ស | QUALIFIED | 1 |
| | SA10133078 | 10 TICS | | | | | |
| | | | | | | | |
| BNA/4.0* | S-6 | DIMETHYPHTHALATE | 330U | 9300 | 9300J | QUALIFIED | 7 |
| ļ | SA10133078 | DIBENZOFURAN | 330U | 200J | 200J | QUALIFIED | 1,7 |
| _ | | DIETHYLPHTHALATE | 330U | 2500 | 2500J | QUALIFIED | 7 |
| | | PHENANTHRENE | 330U | 540J | 540J | QUALIFIED | 1,7 |
| | | FLUORANTHENE | 330U | 340J | 340J | QUALIFIED | 1,7 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 58J | 2000B | 2000ЛВ | QUALIFIED | 3,7 |
| | | 21 TICS | | | | | |
| L | | UNKNOWN RT=6.81 | 3300J | 1600JAB | 1600NB | NEGATED | 2,7 |
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| PEST/3.0+ | S-6 | DIELDRIN | 3.3U | 16 P | 16J | QUALIFIED | 6 |
| | SA10133078 | 4,4-DDD | 3.3U | 25P | 25J | QUALIFIED | 6 |
| | | 4,4-DDT | 3.3U | 52P | 52J | QUALIFIED | 6 |
| | | ENDRIN ALDEHYDE | 3.3U | 22P | 22J | QUALIFIED | 6 |
| | | AROCLOR-1260 | 33U | 200 | 200 | | |
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THE ANALYSIS IS QUALIFIED ESTIMATED DUE TO EXCEEDED HOLDING TIME. THE NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

| CASE NO: 18347 | SITE NAME: <u>VANGUARD</u> |
|------------------------|----------------------------|
| AB NAME: <u>NYTEST</u> | SAMPLE MATRIX: SOIL |
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|-------|-------------------|------------|--|----------------|-----------------|-----------------|-----------------|--------------|
| | FRACTION /D.F. | SAMPLE ID | ANALYTE | BLANK CONC. | REPORT CONC. | REPORT CONC. | QA DECISIONS | FOOT NOTE |
| - 13 | VOA/1.0 | S-7 | METHYLENE CHLORIDE | 7 J | 35B | 35JB | QUALIFIED | 3 |
| | | SA10133079 | ACETONE | 8J | 15BJ | 15NB | NEGATED | 1,2 |
| | | | TOLUENE | 10U | 73 | 73 | QUALIFIED | 1 |
| | | | 1 TIC | | | | | |
| | | | | | | | | |
| | BNA/2.0 | S-7 | PHENOL | 330U | 33OJ | 330J | QUALIFIED | 1 |
| - [] | | SA10133079 | DIMETHYLPHTHALATE | 330U | 280J | 280J | QUALIFIED | 1 |
| 1) | | | 2,6-DINITROTOLUENE | 330U | 1200J | 1200J | QUALIFIED | 1 |
| | | | DIETHYLPHTHALATE | 330U | 150J | 150J | QUALIFIED | 1 |
| į. | | | PHENANTHRENE | 330U | 410J | 410J | QUALIFIED | 1 |
| | | | DI-N-BUTYLPHTHALATE | 330U | 330J | 330J | QUALIFIED | 1 |
| | | | FLUORANTHENE | 330U | 390J | 390J | QUALIFIED | 1 |
| | | | BUTYLBENZYLPHTHALATE | 330U | 81 0 J | 81QJ | QUALIFIED | 1 |
| | | | BIS(2-ETHYLHEXYL)PHTHALATE | 1100 | 4300B | 4300ЛВ | QUALIFIED | 3 |
| | | | DI-N-OCTYLPHTHALATE | 330U | 190J | 190J | QUALIFIED | 1 |
| | | | 21 TICS | | | | | |
| Ţ | | | UNKNOWN RT=6.77 | 8400J | 5100JAB | 5100NB | NEGATED | 2 |
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| | PEST/10.0+ | S-7 | ENDOSULFAN I | 1.7U | 40 | 40 | | |
| | | SA10133079 | 4,4-DDT | 3.3U | 210P | 2100 | QUALIFIED | 6 |
| T | | | ENDRIN ALDEHYDE | 3.3U | 390 | 390 | | |
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THE NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

CASE NO: <u>18547</u>

SITE NAME: VANGUARD

AB NAME: <u>NYTEST</u>

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | POOT NOTE |
|---------------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0 | S-8 | METHYLENE CHLORIDE | 10U | SJ | SJ | QUALIFIED | 1 |
| | SA10133080 | ACETONE | ગ્ર | 7BJ | 7NB | NEGATED | 1,2 |
| | | TOLUENE | 10U | 2.J | 2J | QUALIPIED | 1 |
| | | 4 TICS | | | | | |
| 1 | | | | | | | |
| BNA/4.0+ | S-8 | PHENOL | 330U | 1300J | 1300J | QUALIFIED | 1 |
| | SA10133080 | NAPHTHALENE | 330U | 1200J | 1200J | QUALIFIED | 1 |
| | | 2-METHYLNAPHTHALENE | 330U | 480J | 480J | QUALIFIED | 1 |
| | | DIMETHYLPHTHALATE | 330U | 1300J | 1300J | QUALIFIED | 1 |
| | | ACENAPHTHYLENE | 330U | 76 0J | 760J | QUALIFIED | 1 |
| | · | 2,6-DINITROTOLUENE | 330U | 2000 | 2000 | | **** |
| | | ACENAPHTHENE | 330U | 770J | <i>77</i> 0J | QUALIFIED | 1 |
| | | DIBENZOFURAN | 330U | 540J | 540J | QUALIFIED | 1 |
| | | DIETHYLPHTHALATE | 330U | 350J | 350J | QUALIFIED | 1 |
| | | FLUORENE | 330U | 920J | 920J | QUALIFIED | 1 |
| | | PHENANTHRENE | 330U | 5800 | 5800 | | |
| | | ANTHRACENE | 330U | 1500J | 1500J | QUALIFIED | 1 |
| | | DI-N-BUTYLPHTHALATE | 330U | 470J | 470J | QUALIFIED | 1 |
| | | FLUORANTHENE | 330U | 6400 | 6400 | | |
| | | PYRENE | 330U | 7600 | 7600J | QUALIFIED | 5 |
| | | BUTYLBENZYLPHTHALATE | 330U | 280J | 280J | QUALIFIED | 1,5 |
| | | BENZO(a)ANTHRACENE | 330U | 3700 | 3700J | QUALIFIED | 5 |
| | | CHRYSENE | 330U | 4800 | 4800J | QUALIFIED | 5 |
| <u>.</u> | | BIS(2-ETHYLHEXYL)PHTHALATE | 1100 | 3600B | 3600JB | QUALIFIED | 3,5 |
| | | BENZO(b)FLUORANTHENE | 330U | 3200 | 3200 | | |
| | | BENZO(k)FLUORANTHENE | 330U | 3200 | 3200 | | |
| | | BENZO(a)PYRENE | 330U | 3700 | 3700 | | |
| | | INDENO(1,2,3-cd)PYRENE | 330U | 2600 | 2600 | | |
| | | BENZO(g,h,i)PERYLENE | 330U | 2500 | 2500 | | |
| | | 21 TICS | | | | | |
| , ш., ., ., ., | | UNKNOWN RT=6.85 | 8400J | 13000JAB | 13000NB | NEGATED | 2 |
| | | CHEW HAT - O.O. | 51000 | 13000713 | INOUTH | NEARLE | |
| | | | | | | | |

| | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-----------|------------|-----------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| PEST/3.0* | S-8 | ENDOSULFAN I | 1.7U | 21 | 21 | | |
| | SA10133080 | 4,4-DDT | 3.3U | 12ЛР | 12J | QUALIFIED | 1 |
| | | ENDRIN ALDEHYDE | 3.3U | 13JP | 13J | QUALIFIED | 1,6 |
| | | | | | | | |
| | | | | | | | |

ALL SAMPLE DATA QUANTIFIED IN REFERENCE TO INTERNAL STANDARD CHRYSENE ARE QUALIFIED ESTIMATED. ALL NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILLUTED ANALYSIS.

CASE NO: 18547

SITE NAME: VANGUARD

B NAME: <u>NYTEST</u>

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-------------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0* | S-9RE | METHYLENE CHLORIDE | 10U | ध | ស | QUALIFIED | 1,4 |
| | SA10133081 | ACETONE | 3J | 8BJ | 8NB | NEGATED | 1,2 |
| | | TOLUENE | 10U | 11J | 11J | QUALIFIED | 1,4 |
| | | 5 TICS | | | | | |
| | | | | | | | |
| BNA/8.0+ | S-9 | NAPHTHALENE | 330U | 810J | 810R | REJECTED | 1,5 |
| | SA10133081 | 2-METHYLNAPHTHALENE | 330U | 590J | 590R | REJECTED | 1,5 |
| | | ACENAPHTHYLENE | 330U | 660J | 660R | REJECTED | 1,5 |
| | | ACENAPHTHENE | 330U | 2400J | 2400R | REJECTED | 1,5 |
| | | DIBENZOFURAN | 330U | 1600J | 1600R | REJECTED | 1,5 |
| | | FLUORENE | 330U | 2900J | 2900R | REJECTED | 1,5 |
| | | PHENANTHRENE | 330U | 17000 | 17000R | REJECTED | 5 |
| | | ANTHRANCENE | 330U | 4200 | 4200R | REJECTED | 5 |
| | | CARBAZOLE | 330U | 1400Ј | 1400R | REJECTED | 1,5 |
| | | FLUORANTHENE | 330U | 19000 | 19000R | REJECTED | 5 |
| | | PYRENE | 330U | 13000 | 13000R | REJECTED | 5 |
| | | BENZO(a)ANTHRACENE | 330U | 8800 | 8800R | REJECTED | 5 |
| | | CHRYSENE | 330U | 8300 | 8300R | REJECTED | 5 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 1105 | 1500BJ | 1500R | REJECTED | 1,2,5 |
| | | BENZO(b)FLUORANTHENE | 330U | 6200 | 6200R | REJECTED | 5 |
| | | BENZO(k)FLUORANTHENE | 330U | 4100 | 4100R | REJECTED | 5 |
| | | BENZO(a)PYRENE | 330U | 6500 | 6500R | REJECTED | 5 |
| | | INDENO(1,2,3-cd)PYRENE | 330U | 3300J | 3300R | REJECTED | 1,5 |
| | | BENZO(g,h,i)PERYLENE | 330U | 2800J | 2800R | REJECTED | 1,5 |
| _ | | 17 TICS | | | | | |
| | | UNKNOWN RT=6.76 | 8400J | 22000JAB | 22000R | REJECTED | 2,5 |
| | <u> </u> | | | | | | |
| PEST/3.0** | S-9 | ENDRIN | 3.3U | 12ЛР | 12J | QUALIFIED | 1,6 |
| | SA10133081 | 4,4-DDT | 3.3U | 12ЛР | 12J | QUALIFIED | 1,6 |
| <u> </u> | | ENDRIN ALDEHYDE | 3.3U | 21P | 21J | QUALIFIED | 6 |

ALL DATA ARE CONSIDERED ESTIMATED DUE TO SMC OUTLIERS AND ALL NON-DETECTS QUANTIFIED IN REFERENCE TO CHLOROBENZENE ARE QUALIFIED DUE TO THE INTERNAL STANDARD OUTLIER. THE BASE NEUTRAL FRACTION IS REJECTED DUE TO SURROGATE OUTLIERS. ALL NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

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CASE NO: 18547 AB NAME: <u>NYTEST</u>

SITE NAME: VANGUARD

SAMPLE MATRIX: SOIL

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | POOT NOTE |
|----------------|------------|----------------------------|--------------------------|------------------------|-----------------------|-----------------|--------------|
| VOA/1.0 | S-10 | METHYLENE CHLORIDE | 73 | 15B | 15NB | NEGATED | 2 |
| | SA10133082 | ACETONE | 81 | 7BJ | 7NB | NEGATED | 1,2 |
| | | 3 TICS | | | | | |
| | | | | | | | |
| BNA/1.0 | S-10 | DIMETHYLPHTHALATE | 330U | 140Ј | 140J | QUALIFIED | 1 |
| | SA10133082 | DIETHYLPHTHALATE | 330U | 110J | 1105 | QUALIFIED | 1 |
| 1 | | PHENANTHRENE | 330U | 480J | 480J | QUALIFIED | 1 |
| | | DI-N-BUTYLPHTHALATE | 330U | 1300 | 1300 | | |
| | | FLUORANTHENE | 330U | <i>77</i> 0J | <i>77</i> 0J | QUALIFIED | 1 |
| | | PYRENE | 330U | 6 2 0J | 620J | QUALIFIED | 1 |
| | | BENZO(a)ANTHRACENE | 330U | 280J | 280J | QUALIFIED | 1 |
| | | CHRYSENE | 330U | 360J | 360J | QUALIFIED | 1 |
| | | BIS(2-ETHYLHEXYL)PHTHALATE | 110J | 2600B | 2600ЛВ | QUALIFIED | 3 |
| | | BENZO(b)FLUORANTHENE | 330U | 310J | 310J | QUALIFIED | 1 |
| | | BENZO(k)FLUORANTHENE | 330U | 220J | 220J | QUALIFIED | 1 |
| | - | BENZO(a)PYRENE | 330U | 230J | 230J | QUALIFIED | 1 |
| | | 16 TICS | | | | | |
| | | UNKNOWN RT=6.82 | 8400JA | 14000JAB | 14000NB | NEGATED | 2 |
| | | | | | | | |
| PEST/3.0* | S-10 | DIELDRIN | 3.3U | 13P | 13J | QUALIFIED | 6 |
| | SA10133082 | 4,4-DDE | 3.3U | 88P | 88J | QUALIFIED | 6 |
| | | 4,4-DDD | 3.3U | 30 | 30 | | |
| | | 4,4-DDT | 3.3U | 13P | 13J | QUALIFIED | 6 |
| | | ENDRIN ALDEHYDE | 3.3U | 12JP | 12J | QUALIFIED | 1,6 |
| | | AROCLOR-1260 | 33U | 170P | 1703 | QUALIFIED | 6 |
| | | | | | | | |
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THE NON-DETECTS ARE REJECTED DUE TO THE LACK OF UNDILUTED ANALYSIS.

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CASE NO: <u>18547</u>

AB NAME: <u>NYTEST</u>

SITE NAME: VANGUARD

SAMPLE MATRIX: WATER

| | | | | | | The state of the s | |
|-------------------|------------|--------------------|--------------------------|------------------------|-----------------------|--|---------------------------------------|
| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
| VOA/1.0 | FB-SS | METHYLENE CHLORIDE | 3 J | 10B | 10ЛВ | QUALIFIED | 3 |
| | SA10133084 | NO TICS | | | | | |
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| CASE NO: <u>18547</u> | SITE NAME: VANGUARD |
|-----------------------|----------------------|
| AB NAME: NYTEST | SAMPLE MATRIX: WATER |

| FRACTION /D.F. | SAMPLE ID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOT NOTE |
|-------------------|--------------|--------------------|--------------------------|------------------------|-----------------------|-----------------|---------------------------------------|
| VOA/1.0 | FB-T | METHYLENE CHLORIDE | 3J | 7BJ | 7NB | NEGATED | 1,2 |
| | SA10133083 | 1 TIC | | | | | |
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1 WESTON WAY WEST CHESTER, PA 19380-1449 PHONE: 215-692-3030 FAX: 215-430-3124

INORGANIC QUALITY ASSURANCE REVIEW **NJDEPE** SITE: VANGUARD **SDG NO.: 450**

REVIEW PERFORMED BY THE ANALYTICS DIVISION **OF** ROY F. WESTON, INC.

PREPARED BY: Doug &odfrey

Project Scientist

VERIFIED BY:

Zohreh Hamid, Ph.D.

Section Manager - Data Validation



NJDEPE SITE: VANGUARD SDG No.: 450

CASE SUMMARY

This data validation review consist of the NJDEP data package for the 10-13-93 sampling event. Laboratory analyses were performed by NYTEST Environmental, Inc., (NEI) for Target Analyte List (TAL) inorganics and TPHC (ten samples).

All data have been validated with regard to usability according to the quality assurance guidelines set forth by contract X-26113 (CLP) and DPFSR Standard Operating Procedure (SOP NO.:5.A.2, Revision Number:2).

If you have any questions or comments on this data review, please contact Zohreh Hamid at (215) 344-3745.

The following samples are contained within this report:

| SAMPLE IDENTIFICATION | SAMPLE IDENTIFICATION |
|--------------------------|-----------------------|
| SA10133073 | SA10133078 |
| SA10133074 | SA10133079 |
| SA10133075 | SA10133080 |
| SA10133076 | SA10133081 |
| SA10133077 | SA10133082 |

All samples received at the laboratory on 10-14-93.



NJDEPE - Vanguard

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OUALITY ASSURANCE REVIEW

The findings offered in this report are based upon a rigorous review of the following criteria, and all deficiencies are summarized under each parameter:

- Data Completeness
 - Holding Times
- Calibration Analysis
 - Contract Required Detection Limit Sample Analysis
 - Blank Sample Analysis
- Interference Check Sample Analysis
 - Matrix Spike/Post-Digestion Spike Sample Analysis
 - Duplicate Digestion Sample Analysis
- Laboratory Control Sample Analysis
- Serial Dilution Sample Analysis
- Quarterly Verification of Instrument Parameters
- Sample Result Verification
- Preparation Logs
- Run Logs
- * All criteria were met for this classification.

HOLDING TIMES

The holding time for CN was exceeded by one day. The non-detected and detected sample results are qualified estimated.

CONTRACT REQUIRED DETECTION LIMITS

The CRDL standard recoveries for Sb (75.7%), Cd (127.7%), Cr (137.8%), Se (122.0%), and Ag (62.8%) were outside the 80-120% validation requirement limit. The reported sample values up to 10X CRDL are qualified estimated for the affected samples. The non-detected values for Sb and Ag are qualified estimated.

NJDEPE - Vanguard

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BLANK ANALYSIS

The soil preparation blank contained Ag at levels greater than the IDL. The results for this analyte was qualified based on contamination in the blank analysis.

MATRIX SPIKE ANALYSIS

The spike recoveries for Cd (125.2%) and Pb (194.2%) were outside the control limits of 75-125%. The non-detected sample results are accepted unqualified. The detected sample results are qualified estimated and considered to be biased high.

DUPLICATE DIGESTION ANALYSIS

The duplicate digestion sample results were outside the acceptable control limits for Al, Sb, As, Ba, Cd, and Mn. The reported results are qualified estimated.

GRAPHITE FURNACE

The following samples analyzed by graphite furnace had analytical spike recoveries outside the 85-115% QC limits:

| SAMPLE IDENTIFICATION | ANALYTE | PER CENT RECOVERY |
|-----------------------|---------|-------------------|
| SA10133074 | Se | 118.0* |
| SA10133080 | Se/Tl | 139.0*/116.0* |
| SA10133081 | Tl | 121.0* |
| SA10133082 | Se | 117.0* |

* The reported sample result should be qualified estimated, however, Se and Tl were as not detected in these samples. Therefore, the data are accepted unqualified.



NJDEPE - Vanguard

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SAMPLE RESULTS

The results for SA10133076 were obtained by Method of Standard Addition. The correlation coefficient was >0.995, so no action was required.

SUMMARY

The data package was complete. The quality of the data was good. The data is considered usable with the applied qualifier codes.

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ATTACHMENTS

1. Attachment I - Glossary of Data Qualifier Codes

2. Attachment II - Target Analyte Summary

3. Attachment III - NJDEP Data Validation Forms



ATTACHMENT I
GLOSSARY OF DATA QUALIFIER CODES



GLOSSARY OF DATA QUALIFIERS

CODES RELATING TO IDENTIFICATION

(confidence concerning presence or absence of compounds):

- U = NOT DETECTED SUBSTANTIALLY ABOVE THE LEVEL REPORTED IN LABORATORY OR FIELD BLANKS.
- R = UNRELIABLE RESULT. ANALYTE MAY OR MAY NOT BE PRESENT IN THE SAMPLE. SUPPORTING DATA NECESSARY TO CONFIRM RESULT.
- N = NEGATED COMPOUND WAS CONSIDERED AS NOT PRESENT IN THE SAMPLE.

(NO CODE) = CONFIRMED IDENTIFICATION

CODES RELATING TO QUANTITATION

(can be used for both positive results and sample quantitation limits):

- J = ANALYTE PRESENT. REPORTED VALUE MAY NOT BE ACCURATE OR PRECISE.
- UJ = THE REPORTED QUANTITATION LIMITS ARE QUALIFIED ESTIMATED.

OTHER CODES

Q = NO ANALYTICAL RESULT.



ATTACHMENT II TARGET AND NON-TARGET ANALYTE SUMMARY



FOOTNOTES

- 1. The non-detected values are quantitatively qualified due to an exceeded holding time of less than 10 days.
- 2. The reported concentration was quantitatively qualified because the concentration was below the CRDL but greater than the IDL. The concentration is considered estimated since the value is at the low end of the instrument's performance.
- 3. The reported results up to 10X the CRDL are qualified estimated due to the high recovery in the CRDL standard analysis. The reported results near the detection limits are biased high.
- 4. The reported results up to 10X the CRDL are qualified estimated due to the low recovery in the CRDL standard analysis. The reported results near the detection limits are biased low.
- 5. The non-detected values are qualified estimated due to the low recovery in the CRDL standard analysis.
- 6. The reported positive result up to $\leq 3X$ the blank contamination level is considered negated and is qualified B due to the blank contamination.
- 7. The reported value was qualified because the spike recovery was greater than 125% but less than or equal to 200%.
- 8. In the duplicate sample analysis, the analyte fell outside the control limits of $\pm 20\%$ or \pm CRDL. Therefore, the result was qualified.

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133073 | 854701 | ALUMINUM | | 2280 | 2280J | QUALIFIED | 8 |
| | | ANTIMONY | | 22.5 | 22.5J | QUALIFIED | 4,8 |
| | | ARSENIC | | 8.2 | 8.2J | QUALIFIED | 8 |
| | | BARIUM | | 46.5 | 46.5J | QUALIFIED | 8 |
| | | CALCIUM | | 3690 | 3690 | | |
| | | CHROMIUM | | 13.5 | 13.5J | QUALIFIED | 3 |
| | | COPPER | | 39.1 | 39.1 | | |
| | | IRON | | 7310 | 7310 | | |
| | | LEAD | | 96.4 | 96.4J | QUALIFIED | 7 |
| | | MERCURY | | 1.0 | 1.0 | | |
| | | MAGNESIUM | | 981B | 981J | QUALIFIED | 2 |
| | | MANGANESE | | 52.0 | 52.QJ | QUALIFIED | 8 |
| | | SILVER | 1.494B | 1.6B | 1.6BN | NEGATED | 2,4,6 |
| | | SODIUM | | 46.1B | 46.1J | QUALIFIED | 2 |
| | | VANADIUM | | 13.1 | 13.1 | | |
| | | ZINC | | 97.7 | 97.7 | | |
| | | CYANIDE | | 0.66U | 0.66UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

SAMPLE MATRIX: <u>SOIL</u> UNIT: <u>mg/kg</u>

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|---------------------------------------|----------|
| SA10133074 | 854702 | ALUMINUM | | 3490 | 3490J | QUALIFIED | 8 |
| | | ANTIMONY | | 50.6 | 50.6J | QUALIFIED | 4,8 |
| | | ARSENIC | | 4.2 | 4.2J | QUALIFIED | 8 |
| | | BARIUM | | 48.7 | 48.7J | QUALIFIED | 8 |
| | | BERYLLIUM | | 0.31B | 0.31J | QUALIFIED | 2 |
| | | CALCIUM | | 7840 | 7840 | | |
| | | CHROMIUM | | 19.0 | 19.03 | QUALIFIED | 3 |
| | | COBALT | | 3.3B | 3.3J | QUALIFIED | 2 |
| | | COPPER | | 37.8 | 37.8 | · · · · · · · · · · · · · · · · · · · | |
| | | IRON | | 9770 | 9770 | | |
| | | LEAD | | 130 | 130J | QUALIFIED | 7 |
| | | MAGNESIUM | | 4470 | 4470 | | |
| | | MANGANESE | | 79.6 | 7 9.6J | QUALIFIED | 8 |
| | | MERCURY | | 0.55 | 0.55 | | |
| | | NICKEL | | 7.0B | 7.0J | QUALIFIED | 2 |
| | | POTASSIUM | | 546B | 546J | QUALIFIED | 2 |
| | | SILVER | 1.494B | 1.2B | 1.2BN | NEGATED | 2,4,6 |
| | | SODIUM | | 34.8B | 34.8J | QUALIFIED | 2 |
| | | VANADIUM | | 21.7 | 21.7 | | |
| | | ZINC | | 138 | 138 | | |
| | | CYANIDE | | 0.44U | 0.44UJ | QUALIFIED | 11 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

SAMPLE MATRIX: SOIL

UNIT: mg/kg

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133075 | 854703 | ALUMINUM | | 2390 | 2390J | QUALIFIED | 8 |
| | | ANTIMONY | | 217 | 2173 | QUALIFIED | 8 |
| | | ARSENIC | | 4.9 | 4.9J | QUALIFIED | 8 |
| | | BARIUM | | 81.1 | 81.11 | QUALIFIED | 8 |
| | | CALCIUM | | 1630 | 1630 | | |
| | | CHROMIUM | | 140 | 140 | | |
| | | COBALT | | 3.6B | 3.6J | QUALIFIED | 2 |
| | | COPPER | | 49.6 | 49.6 | | |
| | | IRON | | 21700 | 21700 | | |
| | | LEAD | | 279 | 279J | QUALIFIED | 7 |
| | | MAGNESIUM | | 1090B | 109QJ | QUALIFIED | 2 |
| | | MANGANESE | | 88.0 | 88.OJ | QUALIFIED | 8 |
| | | MERCURY | | 0.78 | 0.78 | | |
| | | NICKEL | | 53.5 | 53.5 | | |
| | | SILVER | 1.494B | 1.0 | 1.0J | QUALIFIED | 5 |
| | | SODIUM | | 138B | 138J | QUALIFIED | 2 |
| | | VANADIUM | | 16.6 | 16.6 | | |
| | | ZINC | | 132 | 132 | | |
| | | CYANIDE | | 0.62U | 0.62UJ | QUALIFIED | 1 |

CASE NO: <u>SDG NO.: 450</u>

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133076 | 854704 | ALUMINUM | | 3110 | 3110J | QUALIFIED | 8 |
| | | ANTIMONY | | 570 | 570J | QUALIFIED | 8 |
| | | ARSENIC | | 8.4 | 8.4J | QUALIFIED | 8 |
| | | BARIUM | | 88.8 | 88.83 | QUALIFIED | 8 |
| | | BERYLLIUM | | 0.31B | 0.31J | QUALIFIED | 2 |
| | | CALCTUM | | 8630 | 8630 | | |
| | | CHROMIUM | | 117 | 117 | | |
| | | COBALT | | 14.2B | 14.2J | QUALIFIED | 2 |
| | | COPPER | | 247 | 247 | | |
| | | IRON | | 94700 | 94700 | | |
| | | LEAD | | 788 | 788J | QUALIFIED | 7 |
| | | MAGNESIUM | | 8610 | 8610 | | |
| | | MANGANESE | | 441 | 441J | QUALIFIED | 8 |
| | | MERCURY | | 0.26 | 0.26 | | |
| | | NICKEL | | 173 | 173 | | |
| | | SILVER | 1.494B | 1.1 | 1.13 | QUALIFIED | 5 |
| | | SODIUM | | 836B | 836J | QUALIFIED | 2 |
| | | VANADIUM | | 30.3 | 30.3 | | |
| | | ZINC | | 7300 | 7300 | | |
| | | CYANIDE | | 0.65U | 0.6SUJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133077 | 854705 | ALUMINUM | | 9030 | 9030J | QUALIFIED | 8 |
| | | ANTIMONY | | 827 | 827J | QUALIFIED | 8 |
| | | ARSENIC | | 8.1 | 8.1J | QUALIFIED | 8 |
| | | BARIUM | | 336 | 336J | QUALIFIED | 8 |
| | | BERYLLIUM | | 1.1B | 1.1J | QUALIFIED | 2 |
| | | CADMIUM | | 4.6 | 4.6J | QUALIFIED | 3,7,8 |
| | | CALCIUM | | 6860 | 6860 | | |
| | | CHROMIUM | | 52.3 | 52.3 | | |
| | | COBALT | | 12.0B | 12.0J | QUALIFIED | 2 |
| | | COPPER | | 823 | 823 | | |
| | | IRON | | 39300 | 39300 | | |
| | | LEAD | | 500 | 500.j | QUALIFIED | 7 |
| | | MAGNESIUM | | 5680 | 5680 | | |
| | | MANGANESE | | 305 | 305J | QUALIFIED | 8 |
| | | MERCURY | | 1.0 | 1.0 | | |
| | | NICKEL | | 35.7 | 35.7 | | |
| | | POTASSIUM | | 1130B | 1130J | QUALIFIED | 2 |
| | | SILVER | 1.494B | 1.2 | 1.25 | QUALIFIED | 5 |
| | | SODIUM | | 188B | 188J | QUALIFIED | 2 |
| | | VANADIUM | | 37.9 | 37.9 | | |
| | | ZINC | | 1990 | 1990 | | |
| | | CYANIDE | | 0.68U | 0.68UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | POOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133078 | 854706 | ALUMINUM | | 2890 | 2890J | QUALIFIED | 8 |
| | | ANTIMONY | | 726 | <i>7</i> 26J | QUALIFIED | 8 |
| | | ARSENIC | | 13.5 | 13.5J | QUALIFIED | 8 |
| | | BARIUM | | 298 | 298J | QUALIFIED | 8 |
| | | CADMIUM | | 42.0 | 42.0J | QUALIFIED | 7,8 |
| | | CALCIUM | | 5440 | 5440 | | |
| | | CHROMIUM | | 64.0 | 64.0 | | |
| | | COBALT | | 25.0 | 25.0 | | |
| | | COPPER | | 323 | 323 | | |
| | | IRON | | 123000 | 123000 | | |
| | | LEAD | | 3810 | 3810J | QUALIFIED | 7 |
| | | MAGNESIUM | | 1530 | 1530 | | |
| | | MANGANESE | | 776 | <i>7</i> 76J | QUALIFIED | 8 |
| | | MERCURY | | 1.7 | 1.7 | | |
| | | NICKEL | | 97.2 | 97.2 | | |
| | | SILVER | 1.494B | 1.4B | 1.4BN | NEGATED | 3,4,6 |
| | | SODIUM | | 91.6B | 91.6J | QUALIFIED | 2 |
| | | VANADIUM | | 42.7 | 42.7 | | |
| | | ZINC | | 2510 | 2510 | | |
| | | CYANIDE | | 0.83U | 0.83UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133079 | 854707 | ALUMINUM | | 1370 | 1370J | QUALIFIED | 8 |
| | | ANTIMONY | | 130 | 130J | QUALIFIED | 4,8 |
| | | ARSENIC | | 2.6B | 2.6J | QUALIFIED | 2,8 |
| | | BARIUM | | 34.5B | 34.5J | QUALIFIED | 2,8 |
| | | CADMIUM | | 4.0 | 4.0J | QUALIFIED | 3,7,8 |
| | | CALCIUM | | 15500 | 15500 | | |
| | | CHROMIUM | | 17.8 | 17.8J | QUALIFIED | 3 |
| | | COPPER | | 39.4 | 39.4 | | |
| | | IRON | | 7470 | 7470 | | |
| | | LEAD | | 115 | 11 5 J | QUALIFIED | 7 |
| | | MAGNESIUM | | 423B | 423J | QUALIFIED | 2 |
| | | MANGANESE | | 61.6 | 61.6 J | QUALIFIED | 8 |
| | | MERCURY | | 0.39 | 0.39 | | |
| | | NICKEL | | 12.0B | 12.0 | QUALIFIED | 2 |
| | | SILVER | 1.494B | 1.4 | 1.4J | QUALIFIED | 5 |
| | | SODIUM | | 118B | 118 J | QUALIFIED | 2 |
| | | VANADIUM | | 10.8B | 10.8J | QUALIFIED | 2 |
| | | ZINC | | 414 | 414 | | |
| | | CYANIDE | | 0.91U | 0.91UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

SAMPLE MATRIX: <u>SOIL</u> UNIT: <u>mg/kg</u>

| | | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SAMPLE ID | LABID | ALUMINUM | whe. | 7140 | 7140J | QUALIFIED | 8 |
| SA10133080 | 854708 | ANTIMONY | | 465 | 46SJ | QUALIFIED | 8 |
| | | | | 21.0 | 21.0J | QUALIFIED | 8 |
| | | ARSENIC | <u> </u> | | | | 8 |
| | | BARIUM | | 483 | 483J | QUALIFIED | |
| | | BERYLLIUM | | 0.91 | 0.91J | QUALIFIED | 2 |
| | | CADMIUM | | 17.0 | 17.0 J | QUALIFIED | 7,8 |
| | | CALCIUM | <u> </u> | 11300 | 11300 | | |
| | | CHROMIUM | | 91.3 | 91.3 | | |
| | | COBALT | | 17.8 | 17.8 | | |
| | | COPPER | | 247 | 247 | | |
| | | IRON | | 57600 | 57600 | | |
| | | LEAD | | 1410 | 141QJ | QUALIFIED | 7 |
| | | MAGNESIUM | | 6470 | 6470 | | |
| | | MANGANESE | | 623 | 623J | QUALIFIED | 8 |
| | | MERCURY | | 3.2 | 3.2 | | |
| | | NICKEL | | 90.0 | 90.0 | | |
| | | POTASSIUM | | 584 | 584J | QUALIFIED | 2 |
| | | SILVER | 1.494B | 1.9B | 1.9J | NEGATED | 2,4,6 |
| | | SODIUM | | 238 | 238J | QUALIFIED | 2 |
| | | VANADIUM | | 85.5 | 85.5 | | |
| | | ZINC | | 1180 | 1180 | | |
| | | CYANIDE | | 0.61U | 0.61UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | POOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133081 | 854709 | ALUMINUM | | 2120 | 2120J | QUALIFIED | 8 |
| | | ANTIMONY | | 18.3 | 18.3J | QUALIFIED | 4,8 |
| | | ARSENIC | | 41.3 | 41.3J | QUALIFIED | 8 |
| | | BARIUM | | 136 | 136J | QUALIFIED | 8 |
| | | BERYLLIUM | | 0.28B | 0.28J | QUALIFIED | 2 |
| | | CADMIUM | | 1.4 | 1.4J | QUALIFIED | 3,7,8 |
| | | CALCIUM | | 2640 | 2640 | | |
| | | CHROMIUM | | 36.1 | 36.1 | | |
| | | COBALT | | 8.8B | 8.8J | QUALIFIED | 2 |
| | | COPPER | | 109 | 109 | | |
| | | IRON | | 46000 | 46000 | | |
| | | LEAD | | 285 | 285J | QUALIFIED | 7 |
| | | MAGNESIUM | | 467B | 467J | QUALIFIED | 2 |
| | | MANGANESE | | 230 | 230J | QUALIFIED | 8 |
| | | MERCURY | | 32.1 | 32.1 | | |
| | | NICKEL | | 17.8 | 17.8 | | |
| | | SELENIUM | | 1.2 | 1.2J | QUALIFIED | 3 |
| | | SILVER | 1.494B | 0.99ับ | 0.99UJ | QUALIFIED | 5 |
| | | SODIUM | | 175B | 175J | QUALIFIED | 2 |
| | | VANADIUM | | 18.2 | 18.2 | | |
| | | ZINC | | 258 | 258 | | |
| | | CYANIDE | | 0.48U | 0.48UJ | QUALIFIED | 1 |

CASE NO: SDG NO.: 450

SITE NAME: VANGUARD

LAB NAME: NYTEST

SAMPLE MATRIX: <u>SOIL</u> UNIT: <u>mg/kg</u>

| SAMPLE ID | LABID | ANALYTE | METHOD BLANK CONC. | LAB REPORT CONC. | QA REPORT CONC. | QA DECISIONS | FOOTNOTE |
|------------|--------|-----------|--------------------------|------------------------|-----------------------|-----------------|----------|
| SA10133082 | 854710 | ALUMINUM | | 2670 | 2670J | QUALIFIED | 8 |
| | | ANTIMONY | | 8.8B | 8.8J | QUALIFIED | 2,4,8 |
| | | ARSENIC | | 4.2 | 4.2J | QUALIFIED | 8 |
| | | BARIUM | | 46.6 | 46.6J | QUALIFIED | 8 |
| | | BERYLLIUM | | 0.30B | 0.30J | QUALIFIED | 2 |
| | | CADMIUM | | 1.0B | 1.0J | QUALIFIED | 2,3,7,8 |
| | | CALCIUM | | 4050 | 4050 | | |
| | | CHROMIUM | | 17.5 | 17.5J | QUALIFIED | 3 |
| | | COPPER | | 42.9 | 42.9 | | |
| | | IRON | | 7560 | 7560 | | |
| | | LEAD | | 116 | 116J | QUALIFIED | 7 |
| | | MAGNESIUM | | 1930 | 1930 | | |
| | | MANGANESE | | 54.1 | 54.1J | QUALIFIED | 8 |
| | | MERCURY | | 0.54 | 0.54 | | |
| | | POTASSIUM | | 458B | 458J | QUALIFIED | 2 |
| | | SILVER | 1.494B | 0.89U | 0.89UJ | QUALIFIED | 5 |
| | | SODIUM | | 36.0B | 3 6.0J | QUALIFIED | 2 |
| | | VANADIUM | | 13.7 | 13.7 | | |
| | | ZINC | | 109 | 109 | | |
| | | CYANIDE | | 0.69U | 0.69UJ | QUALIFIED | 1 |

ATTACHMENT W

Deborah Mazur 984.3017

WATER-QUALITY DATA FOR THE POTOMAC-RARITAN-MAGOTHY

AQUIFER SYSTEM IN SOUTHWESTERN NEW JERSEY, 1923-83

By Thomas V. Fusillo, Joseph J. Hochreiter, Jr., and Deborah Grant Lord

U.S. GEOLOGICAL SURVEY

Open-File Report 84-737

Prepared in cooperation with

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION,

DIVISION OF WATER RESOURCES



Trenton, New Jersey
November 1984

CAMDEN COUNTY GEOLOGY REPORT

A B S T R A C T

Camden County, New Jersey, is located in the Philadelphia-Camden metropolitan area. The western edge of the county is urban and industrial in character. The central part is less industrial and more suburban in character, and the eastern part is sparsely populated and predominantly agricultural, although urbanization is advancing eastward quite rapidly.

Camden County is in the Atlantic Coastal Plain physiographic province. Underlying the county are unconsolidated sediments of Quaternary, Tertiary, and Cretaceous age, consisting of mostly alternating sands, silts, and clays. The sediments dip gently to the southeast and thicken from 40 feet at the Delaware River to 2,900 feet at the Camden-Atlantic County line. Below the unconsolidated sediments is the pre-Cretaceous crystalline bedrock.

The major fresh-water aquifers in Camden County are sands and gravels of Cretaceous and Tertiary age in the Potomac Group and the Raritan and Magothy Formations; the Cohansey Sand; the Wenonah Formation-Mount Laurel Sand; and the Englishtown Formation. Minor aquifers are found in parts of the Merchantville Formation, the undifferentiated Vincentown and Manasquan Formations, and the Kirkwood Formation. Saturated sands and gravels in the surficial deposits of Quaternary age where in direct contact are commonly hydraulically connected to the underlying aquifers.

The rate of ground-water withdrawal for Camden County was 68 mgd (million gallons per day) in 1966. This was the largest average annual county pumpage in the State in 1966. Eighty-five percent (56 mgd) was pumped from the aquifer system in the Potomac Group and the Raritan and Magothy Formations.

The potentiometric surfaces of all the major artesian aquifers in Camden County declined from 1900 to 1970 as a result of pumping. The largest decline occurred in the aquifer system in the Potomac Group and the Raritan and Magothy Formations. At Haddon Heights, in the western part of the county, the potentiometric surface declined about 110 feet from 1900 to 1968. The potentiometric surface of the aquifer in the Wenonah Formation-Mount Laurel Sand declined 43 feet in about 60 years in the vicinity of Berlin Borough.

The chemical quality of ground water in Camden County

ATT ACTION OF AN

probably extended from Philadelphia to the area updip from New Brooklyn Park.

A thickness map of the Potomac Group and the Raritan and Magothy Formations is given in figure 9. Also shown is the percentage of sand as estimated from geophysical logs from wells that penetrate the section from the top of the Magothy to the crystalline rocks. The thickness lines show the thickening of the sediments downdip. The percentage of sand indicates greater values in the updip area and lower values downdip area. The estimated percentage of sand at the Brooklyn Park well (WI 27) is 37. Based on the depositional concept developed by Fisher and McGowen (1969) the New Brooklyn well is interpreted as being in the distributary channel-marsh and swamp facies. The sediments found in the Haddonfield area are interpreted as including the transitional, slightly meandering channel facies of Fisher and McGowen (1969). The dendritic tributary channel facies is interpreted as occurring in the area from Philadelphia to the northern part Camden County. The highly meandering channel probably occurs in the area downdip from Elm Tree Farms well (VO 12). Lack of data prevents the delineation of the extent of this facies downdip of the Elm Tree Farms area.

Particle-size analysis is available for samples from the New Brooklyn Park test well (WI 27) in Winslow Township (table 5). The particle-size analysis shows the predominant silt and clay values.

Hydrology

The most productive source of ground water in Camden is the Potomac-Raritan-Magothy aquifer system. The County aquifer system is made up of aquifers consisting of sand with some gravel and confining units consisting of silts and clays overlain in the outcrop area by highly permeable Pleistocene sand and gravel. The sands are separated into three hydrologic units, an upper, middle, and lower aquifer. The upper unit consists mainly of the sands of the Magothy Formation. The middle and lower units consist mainly of sands of the Raritan Formation and the Potomac Group. The thickness of the three hydrologic units are shown in figures 11, 12, and The lower aquifer in the outcrop area is overlain by and 13. hydraulically connected to the Pleistocene deposits and is a water-table aquifer in Philadelphia. The upper aquifer outcrop area is overlain by and hydraulically connected to the Pleistocene deposits in Camden County and is under water-table conditions.

Cretaceous System

Potomac Group and the Raritan and Magothy Formations

Regional Setting and Stratigraphic Framework

and Magothy are fluvial-marginal marine sediments of Early to Raritan Late Cretaceous age and overlie the pre-Cretaceous crystalline These sediments make up an extensive part of the Plain sediments in New Jersey and in the adjacent states. Major structures which contain the greatest thickness of sediments are the Salisbury embayment (Richards, 1945) in Delaware and the Raritan embayment in the vicinity of Raritan Coastal Bay and eastern Long Island. The area between these two embayments, which includes Camden County, contains arches and troughs. The outcrop area of the Potomac Group and Raritan and Magothy Formations in Camden County (21 square miles in area) is in the northwestern part of the county near permeable Pleistocene deposits in the outcrop area. and Magothy

The Potomac Group and the Raritan and Magothy Formations form a wedge-shaped body that thickens in a downdip direction and is underlain by the crystalline basement. The configuration of the crystalline rocks is shown in figure 7. The upper limit of the wedge-shaped body is the contact between the upper limit of the wedge-shaped body is the contact between the Magothy The Merchantville Formation and the top of the Magothy the Merchantville The difference between the basement and the top of the Magothy is the total thickness of Potomac Group the top of the Magothy is the total thickness of Potomac Group and the Raritan and Magothy Formations (fig. 9).

In Camden County the thickness of the Potomac Group and Raritan and Magothy Formations ranges from approximately 260 feet at the Collingswood well 7 (CO 7), located near the outcrop area, to approximately 1,210 feet at the New Brooklyn Park test well (WI 27). This is shown on the thickness map in figure 9. The distance between the two wells is 13 miles.

Correlation of part of the Cretaceous stratigraphic section in northern New Jersey and Maryland as determined by Wolfe and Pakiser (1971) is given below.

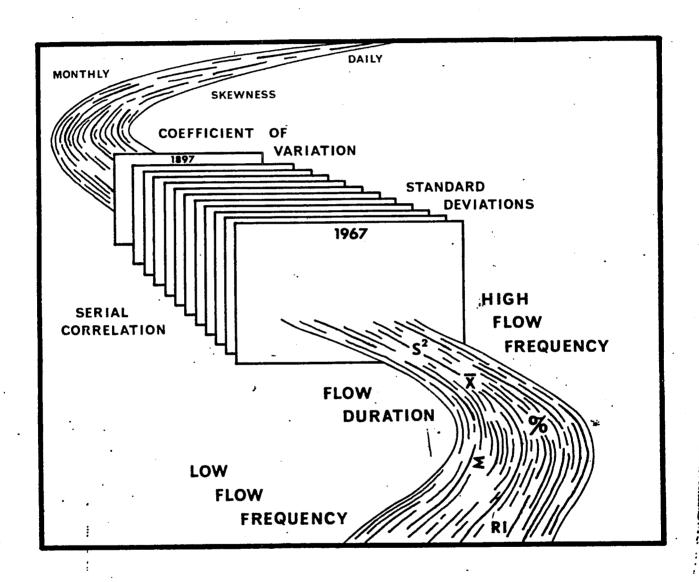
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ATTACHMENT X

STATISTICAL SUMMARIES OF NEW JERSEY STREAMFLOW RECORDS

WATER RESOURCES CIRCULAR 23



STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESCURCES

Prepared in cooperation with
United States Department of the Interior
Geological Survey

1970

ATTACHMENT X

1-4635.00 DELAWARE RIVER AT TRENTON, N. J.

Location. -- Lat 40°13'18", long 74°46'42", 450 ft upstream from Calhoun Street Bridge.

Drainage area. -- 6,780 sq mi.

Remarks. -- Regulation reduces flood peaks and augments low flow. Diversions significant at low flow prior to November 1935 and since December 1953.

DURATION TABLE OF DAILY DISCHARGE

| TELASS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 36 31 32 33 34 TELASS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 36 31 32 33 34 TELASS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 36 31 32 33 34 TELASS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 36 31 32 33 34 TELASS 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 19 15 11 12 9 5 6 5 1 7 2 2 1 1 24 25 14 20 14 20 14 14 19 15 11 12 9 5 6 5 1 7 2 2 1 1 2 4 25 14 20 14 20 14 14 10 15 11 12 9 5 6 5 1 7 2 2 1 1 2 4 25 14 20 14 20 14 10 14 10 15 11 12 9 5 6 5 1 7 2 2 1 1 2 4 27 13 14 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10 | |
|--|--|
| NUMBER OF DAYS IN CLASS 9 27 33 17 7 16 14 14 19 22 31 27 21 13 13 20 14 14 7 6 2 2 1 1 1 2 | 194(194) 194(195) 195(195) 195(195) 195(195) 195(195) 196(196) |
| NUMBER OF DAYS IN CLASS 7 27 33 17 7 10 14 14 19 22 23 21 27 21 13 13 20 14 14 7 6 2 2 1 1 2 2 1 1 2 2 534490.0 7 7 5 5 5 16 23 12 32 30 19 24 11 16 19 15 11 12 9 5 6 5 1 7 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 1 2 2 1 2 1 1 2 2 1 2 1 1 2 2 1 | 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 |
| NUMBER OF DAYS IN CLASS 9 27 33 17 7 16 14 16 19 22 23 21 27 21 13 13 20 16 16 16 1 5 17 2 2 1 1 2 453440.0 7 7 5 5 5 18 23 12 32 32 60 19 24 11 61 19 15 11 12 9 5 6 5 1 7 2 2 1 1 1 453440.0 7 7 24 7 13 12 11 25 10 21 19 49 24 27 11 21 15 7 [3 14 10 7 6 4 3 3 2 1 2 3 1 1 4 53440.0 7 6 6 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 | |
| 9 27 33 17 7 16 14 14 19 22 33 21 27 21 13 13 20 14 14 7 6 2 2 1 1 2 4 534490.0 7 7 5 5 5 16 23 12 32 32 60 19 24 11 18 19 19 5 11 12 9 5 6 5 1 7 2 1 1 1 2 4 534490.0 7 7 13 12 11 25 10 21 19 49 24 27 11 21 15 7 13 14 10 7 7 6 4 3 2 1 1 2 1 4 534490.0 7 7 15 12 12 12 5 10 21 19 49 24 27 11 21 15 7 13 14 10 7 7 6 4 3 3 2 1 2 2 1 1 4 534490.0 7 7 16 12 10 12 19 49 24 27 11 21 15 7 13 14 10 7 7 6 4 3 3 2 1 2 2 1 1 4 5234490.0 7 18 6 6 2 6 1 12 14 40 13 13 14 19 28 29 25 23 11 6 6 4 6 4 5 3 3 1 2 2 1 2 1 4 6223460.0 7 18 6 6 2 6 1 12 14 40 13 13 14 19 28 29 25 23 11 6 6 4 6 4 5 3 3 1 2 2 1 2 1 4 6 6 28 12 14 40 13 13 14 19 28 29 25 23 11 6 6 4 6 4 5 3 3 1 1 3726590.0 7 18 6 16 6 26 12 14 40 13 13 14 19 28 29 25 23 11 6 6 4 6 4 5 3 3 1 1 3726590.0 7 18 6 18 6 18 6 18 17 7 11 10 11 6 8 3 3 3 1 3726590.0 7 18 6 18 6 25 22 24 22 29 19 23 28 23 9 1 5 2 3 9 15 2 3 9 18 6 26 25 22 24 22 29 19 23 28 23 9 1 5 2 3 9 18 6 2 6 1 19 17 11 14 14 14 19 9 3 3 1 1 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| NUMBER OF DAYS IN CLASS 9 27 33 17 7 16 14 14 19 22 32 12 77 21 13 13 20 14 14 7 6 2 2 1 1 2 7 5 5 5 16 23 12 32 32 60 19 24 11 18 19 15 11 11 29 5 6 5 1 7 2 1 7 24 7 13 12 11 25 10 21 19 49 24 27 11 21 15 7 13 14 10 7 6 4 3 2 1 2 3 4 15 24 21 25 16 27 19 25 42 31 18 19 17 17 11 11 7 7 1 2 1 2 1 3 4 15 24 21 25 16 27 19 25 42 31 18 19 17 17 11 10 11 6 8 3 3 1 2 3 6 28 12 14 40 13 31 34 19 28 29 25 23 16 6 6 6 4 4 3 3 1 2 3 801440.0 3 5 5 33 35 29 20 39 18 14 16 10 18 16 18 8 17 7 711 10 11 6 8 3 3 3 1 3 726590.0 3 5 12 39 48 26 25 22 24 22 22 20 19 23 22 39 9 1 5 2 9 10 22 21 9 25 16 17 19 30 24 13 21 18 22 18 16 19 17 11 14 4 19 9 3 2 2 1 1 1 1 4 323990.0 1 6 28 24 11 31 27 20 27 23 26 16 19 17 11 14 14 14 19 9 3 2 2 1 1 1 1 2 42 49 29 25 24 4 13 32 11 42 31 16 18 9 8 11 11 13 10 5 3 4 7 2 1 1 1 2 1 2 1 3 40 100.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 2 1 2 1 3 40 100.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 2 1 3 40 100.0 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 4 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 1 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 1 2 2 1 1 1 1 2 1 3 50 400.0 10 14 33 44 28 27 15 10 18 35 17 29 10 29 6 8 5 3 3 3 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| ### AND PROPERTIES OF DAYS IN CLASS 9 27 33 17 7 16 14 14 19 22 23 21 27 21 31 31 32 01 41 4 7 6 2 2 1 1 2 2 4534490.0 7 5 5 5 18 22 12 32 32 00 19 24 11 18 19 15 11 12 9 5 6 5 5 1 7 2 1 1 1 4534490.0 3 4 15 22 12 15 16 27 19 25 42 31 18 19 19 17 11 11 17 7 7 1 2 1 2 1 2 1 4622360.0 3 6 28 12 14 40 13 31 34 19 28 27 28 27 31 12 11 17 17 11 10 11 6 8 3 3 3 1 372490.0 5 5 33 35 29 20 39 18 16 16 10 18 16 18 8 17 7 11 10 11 6 8 8 3 3 3 1 372490.0 5 5 13 30 52 29 20 39 18 16 16 10 18 16 18 8 17 7 11 10 11 6 8 8 3 3 3 1 372490.0 9 10 22 21 9 25 18 17 29 30 24 13 21 18 22 18 16 18 17 5 5 4 3 4 10 4 3 3 1 1 487760.0 9 10 22 21 9 25 18 17 29 30 24 13 21 18 22 18 16 18 17 5 5 5 4 3 4 10 4 3 1 1 4877760.0 9 10 22 21 9 25 18 17 29 30 24 13 21 18 22 18 16 14 11 4 6 2 4 4 1 1 1 497180.0 9 10 22 21 9 25 18 12 22 22 19 13 17 18 33 12 20 9 13 8 7 5 3 1 2 1 1 4871800.0 9 10 10 21 18 22 18 22 24 23 19 13 17 18 33 12 20 9 13 8 7 5 3 1 2 1 1 4871800.0 8 6 20 25 21 18 8 18 22 24 23 19 13 17 18 33 12 20 9 13 8 7 5 3 1 2 1 1 1 2 1 1 4871800.0 8 6 6 19 26 12 24 27 28 29 11 29 29 19 17 11 14 18 22 5 8 5 3 1 2 1 1 1 2 1 1 4871800.0 8 6 6 19 26 12 24 27 28 29 11 29 29 19 17 11 18 18 18 10 2 5 5 2 3 1 1 1 1 1 2 1 1 3587340.0 8 6 6 19 26 12 24 27 28 29 11 29 29 19 17 11 19 18 22 5 8 5 3 1 2 1 1 1 1 2 1 1 3587340.0 8 6 6 19 26 12 24 27 28 29 11 29 29 19 17 11 18 18 10 5 5 3 4 7 2 2 1 1 1 1 2 1 1 3587340.0 8 6 6 19 26 12 24 27 28 29 11 29 29 19 17 11 18 18 20 14 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 2 |
| ### NUMBER OF DAYS IN CLASS 9 27 33 17 7 16 16 14 14 19 27 23 21 27 72 11 31 32 00 14 14 7 6 2 2 1 1 2 4534490.0 7 13 12 11 22 10 10 19 49 24 27 11 21 15 7 13 14 10 7 6 4 3 2 1 2 1 2 1 1 1 2 4210340.0 3744470.0 374470.0 37444 | 6 5 |
| NUMBER OF DAYS IN CLASS 27 33 17 7 16 14 14 19 22 23 21 27 21 13 13 20 14 14 7 6 2 2 1 1 2 4534490.0 455 5 18 23 12 12 26 119 49 24 27 11 21 15 7 13 14 10 7 6 4 3 2 1 2 1 1 4270340.0 42703400.0 4270340.0 4 | 13 47 10 17 7 |
| HUMBER OF DAYS IN CLASS 77 33 17 7 16 14 14 19 22 23 21 27 21 13 13 20 14 14 7 6 2 2 1 1 2 4534430.0 47313 13 12 11 25 10 21 19 49 24 27 11 21 15 7 13 14 10 7 6 4 5 1 7 2 1 1 1 1 470140.0 4701400.0 | 1 1 2 2 |
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